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ABSTRACT

In 1986, the United States Department of Education contracted with Pelavin Associates to conduct a study of the dropout problem in the United States. The research project was undertaken to provide a national overview of the dropout problem, focusing specifically on gender differences; and to identify successful or effective strategies for serving dropout-prone youth and school dropouts. The research was conducted in two phases, consisting of a research review and site visits to nine dropout prevention and recovery programs identified through the review to be relatively effective in reducing the incidence of school dropouts. The findings are reported in three volumes. This document, volume II, focuses on how practitioners and policymakers can effectively address the dropout problem. Section I provides an introduction to the report and section II presents findings from the research review on dropout prevention programs. Types of prevention programs avaiable to dropout-prone youth are reviewed, as are characteristics and components of effective programs. Section III presents results of the site visits, including a comparative description of the nine programs which looks at similarities and differences in program purposes and strategies, target groups, and the services provided. An assessment of the key factors associated with different programs' success and observations about the reasons these programs appear to work effectively are also provided. Section IV presents conclusions to the study and recommendations for future action by practitioners and policymakers. (NB)

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DROPPING OUT OF SCHOOL

Volume II: Promising Strategies and Practices in Dropout Prevention

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December 1987

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PREFACE

In late 1986, the U.S. Department of Education contracted with Pelavin Associates to conduct a study of the dropout problem in the United States. The study has two major purposes. One is to provide a national overview of the dimensions of the problem, focusing particularly on differences in the nature of the problem and the consequences of dropping out of school for male and female youth. The second -- and more important, -- purpose is to identify "successful" or "effective" strategies for serving dropout-prone youth and school dropouts.

The research for this project was conducted in two phases. In the first phase of the research, we conducted a review of the literature on the dropout problem and on dropout prevention programs. We used the review to assess the national dimensions of the dropout problem, to identify the different strategies that are being used currently to address the dropout problem, and to develop a framework for selecting individual dropout programs for greater study through site visits. In the second phase of the research, we conducted site visits to a sample of nine dropout prevention and recovery programs that appear to be working relatively effectively in reducing the incidence of school dropouts.

The study's findings are reported in three volumes under the general title "Dropping Out of School." In Volume I, "Dropping Out of School: Causes and Consequences for Male and Female Youth," we present a national overview of the dropout problem and differences in the dropout problem among young men and women. The report discusses the magnitude of the

dropout problem, the characteristics of male and female dropouts, the reasons different students drop out of school, and the consequences of dropping out for male and female youth.

In this Volume II, "Promising Strategies and Practices in Dropout Prevention," we provide insights into ways practitioners and policy makers can work to effectively address the dropout problem. The volume presents the results of two research activities: a literature review that identifies the components and characteristics of "effective" programs; and site visits to nine dropout prevention and recovery programs that have demonstrated evidence of some success in addressing the dropout problem. We draw on these research activities to identify the most important components of dropout prevention programs and to suggest ways that services in these programs can be delivered most effectively.

Volume III, "Program Profiles," provides more detailed descriptions of the programs reviewed in the site visits. The descriptions include information about the programs' background, the targets of the interventions, program organization and structure, program staff and services, and the effects of the program on attendance, achievement, and retention in school.

Finally, an appendix to the report, "State Programs in Dropout Prevention," discusses state initiatives to address the dropout problem. The appendix presents an overview of programmatic strategies states are using to meet the needs of dropout-prone youth and school dropouts and strategies to finance these efforts. It concludes with a description of current and proposed programs in dropout prevention and recovery.

EXECUTIVE SUMMARY

The problem of school dropouts has become a critical concern to policymakers at the Federal, state, and local levels in recent years. It is estimated that between 290,000 and 325,000 female youths and between 325,000 and 375,000 males drop out of school each year. In addition, there are approximately 2.1 million females and 2.3 million males between the ages of 16 and 24 who are not enrolled in high school and have not completed a high school diploma. While females drop out of school at slightly lower rates than males, students of both genders in some central cities and some rural areas drop out at rates that are three to four times the national average.

Although there has been extensive research on the problem of school dropouts, much of the research has focused on the scope of the problem, rather than on potential solutions. Recently, a number of studies have begun to examine different strategies for serving dropout-prone youth, but this limited body of research has produced different assessments of our knowledge of "what works" in dropout prevention. Some researchers suggest that we still know relatively little about what works in dropout prevention and recovery (General Accounting Office, 1986; Intercultural Development Research Association, 1986); others suggest that there are promising practices that schools might use in working with dropout-prone youth (Orr, 1987); still others suggest that we currently know enough about what works in dropout prevention to develop strategies for effectively dealing with the dropout problem (Hahn and Danzberger, 1987).

This study was undertaken for the U.S. Department of Education with funding from the Women's Educational Equity Act (WEEA) Program to

identify strategies that are currently being used to address the dropout problem, to assess the effectiveness of these strategies, and to suggest ways that these strategies could be implemented. Although the study was concerned with programs that serve dropout-prone youth and school dropouts, particular emphasis was placed on reviewing strategies for serving female students. In this area, the study attempted to determine whether special techniques are used in regular dropout programs to help female youth stay in school or whether programs deal with the problems of male and female students in similar ways. It did not, however, examine dropout prevention practices in programs that were specifically designed to serve female students, e.g., pregnancy and parenting programs, as these programs were reviewed in a separate study funded by the WEEA Program (Earle, Roach, and Fraser, 1987).

To achieve the objectives of the study, two major activities were conducted. The first was a review of the dropout prevention literature to identify practices that appear to be characteristic of effective programs and to guide the selection of programs to study in greater depth through site visits. The second activity consisted of site visits to a selected set of nine programs that show evidence of success in addressing some aspect of the dropout problem. This set included seven dropout prevention programs and two dropout recovery programs which focused on in-school youths at risk of dropping out and two dropout recovery programs which assisted out-of-school youths to return to school and complete a high school education or an equivalent certificate.

The programs selected for the site visits include:

Middle School Prevention Programs

Model School Adjustment Program - Broward County, Florida. A prevention program for sixth-graders in the Driftwood Middle School that includes peer tutoring, individual and group counseling, and parent counseling;

Valued Youth Partnership - San Antonio, Texas. A school-based youth tutoring program involving high-risk junior and senior high school students;

High School Prevention Programs

Dropout Prevention Program - New York City. A program funded by the New York City Board of Education in 10 high schools and 29 middle schools that involves both high school reorganizations and a case management approach to student services;

LaGuardia Middle College High School - Queens, New York. An alternative high school in which students take courses at a community college and receive intense personal counseling;

Peninsula Academies - Menlo Park, California. A program that integrates academic courses and technical training in computers and electronics in high schools and works collaboratively with high-tech firms to provide mentors and internships to students;

Project COFFEE - North Oxford, Massachusetts. A regional, occupational training and instructional program with close ties with the local business community;

Satellite Academy - New York City. An alternative high school with four campuses in three boroughs of the city;

Recovery Programs for Dropouts

Educational Clinics - Washington State. A state-funded dropout recovery program that involves diagnosis of students' educational needs and a short-term program aimed at returning students to regular classroom programs or obtaining a General Educational Development (GED) certificate;

Second Chance Pilot Project - Colorado. A state-funded dropout recovery program operated by school districts to prepare students for a regular high school diploma or an alternative certificate.

The programs selected for this study serve students at different stages of their school careers and employ a variety of strategies to prevent them from dropping out or to help them return to school and complete a high school education or an equivalent certificate. However, it should be noted that the study focused only on supplemental programs for dropout-prone youth, rather than on a more comprehensive approach to the dropout problem. It did not focus on how effective schools or a fundamental restructuring of the schools could attack the dropout problem -- even though some observers suggest that these may be preferred solutions. The programs included here are designed to deal with the specific problems of dropout-prone youth and school dropouts -- not to address or correct the problems of schools. It is, of course, recognized that the success or failure of these programs has implications for schools themselves.

Findings of the Study

The literature on dropout prevention and the site visits to a sample of promising dropout prevention and recovery programs provide some insights into ways that programs are currently structured and some strategies for structuring future programs.

General Observations

One observation is that dropout prevention programs that are not designed specifically as programs for female students, e.g., pregnant and parenting programs, do not appear to treat female students differently than males. Interviews with staff at the programs included in this study did not elicit any special procedures for identifying girls who are at

risk of dropping out nor any special interventions focused on the needs of female students. However, the programs did not appear to focus on the special needs of boys either. Essentially, the programs treated girls in much the same way as boys and, in general, appeared to serve them both equally well. It was not possible to assess from this study whether the practices observed represent the best approach to addressing the unique problems of female students. However, Earle, Roach and Fraser (1987) suggest special components targeted specifically at female students, e.g., collaborative group projects, remedial instruction in abstract spatial reasoning, and special encouragement for females to take courses in math and science, that should be included in dropout prevention programs.

A second observation is that "effective" or "successful" dropout prevention programs appear to have many of the characteristics of effective schools more generally -- in particular, principal leadership. What may be unique to dropout prevention efforts, however, is the principal as "entrepreneur." In the dropout prevention programs included in this study that appear to be working successfully, the principal was an individual who was willing to take risks, to try out new ideas, and to seek out resources in the larger community to meet the needs of his or her students. The principal also exercised a collegial style of leadership, working closely with teachers and program staff to plan program services and implement the program. This leadership style worked to create a greater esprit de corps in the school and generated more of a commitment to the program itself.

Recommended Practices

The literature review and the site visits also identified some unique aspects of the dropout problem that can be addressed by including

particular components or features in dropout prevention programs. Based on this research, it is therefore recommended that program designers structure dropout prevention efforts using the following guidelines.

EARLY INTERVENTION

Direct dropout prevention efforts at younger students who evidence the characteristics of potential dropouts.

For many dropouts, prevention efforts in high school come too late in their education careers to help them stay in school. Program staff in programs included in the study consistently stated that dropout prevention efforts needed to begin at a much earlier stage than high school. The upper elementary grades were seen by some program staff as an appropriate age to begin dropout prevention efforts, while others saw the need for this type of intervention even earlier in students' school careers.

Two of the programs reviewed here specifically take this approach to dropout prevention. The Model School Adjustment Program in the Driftwood Middle School in Broward County, Florida provides sixth-graders who have a record of academic and behavioral problems in elementary school with peer tutoring to help them improve their basic skills and peer and family counseling to help them work through their personal and family problems. The Valued Youth Partnership in San Antonio, Texas, pays junior high school and high school students minimum wage pay for work as tutors to elementary school children as a means to enhance the tutors' self-esteem and improve the academic skills of both tutors and the younger children.

SCHOOL-TO-SCHOOL LINKAGES

Establish linkages between the different levels of schooling (elementary-middle-secondary) to facilitate students' transitions from school to school.

Dropout-prone youth often have serious problems making the transition from elementary school to middle school and then making the next transition to high school. The first transition is difficult because students are moving from a smaller school with self-contained classes to much larger schools with departmentalized programming; the second,

because students who continue to do poorly in school may not feel prepared and thus may not even begin to attend high school.

The programs in this study use a variety of techniques to link school levels and to facilitate students' transitions to the next school. In Theodore Roosevelt High School in the Bronx, New York, an "articulation" coordinator from the high school makes visits to feeder junior high schools to explain the high school program and answer students' questions about the school. In Far Rockaway High School in Queens, New York, a community-based organization provides support services to students in the feeder junior high school as well as the high school, thus helping dropout-prone students ease their way into the high school even before they arrive.

SMALL PROGRAMS AND CLASSES

Keep dropout prevention programs small in size and organize student instruction in small classes.

Many students who drop out of school have been alienated by large bureaucratic institutions where they cannot be distinguished from hundreds of other students. To address this problem, several of the dropout prevention programs have established policies to keep the programs smaller and to create a more supportive environment for students. Satellite Academy, for example, when faced with greater demand for places in the school, opted to open branch campuses, rather than expand a single campus. LaGuardia Middle College High School has similarly opted to keep student enrollment at a maximum of 500 students to ensure personalized attention.

Programs to assist out-of-school youth return to school and complete their high school education are also small in size by design. Educational Clinics, Inc., one of the larger dropout recovery programs funded in Washington State, keeps student enrollment at a maximum of 100 to 125 students to promote a more personalized learning environment.

Many students also drop out of school because they have been unable to function successfully in large classes where they did not receive individualized instruction and personal attention. Small class size works to overcome some of the students' disaffection with school by allowing teachers to use a more

interactive style, to individualize their program of instruction, and to experiment with different approaches to working with students.

Small class size is a characteristic of a number of the programs included in this study, but it is especially prevalent in the dropout recovery programs. Most classes in the Educational Clinics in Washington State contain between five and ten students. Similarly, the Second Chance Centers visited in Colorado organize classes with fewer than 20 students to allow teachers to individualize student programs and to match their instructional approaches with student learning styles.

BASIC SKILLS

Focus dropout prevention programs on basic skills as an initial step in improving academic performance.

Most dropout-prone youth are deficient in basic skills and, as a result, have been retained in grade at least once or twice over their school careers. To redress this problem, almost all of the programs in this study concentrate academic coursework on basic skills in core subject areas. Program staff stress that while they would like to provide a more enriched curriculum that develops skills in critical thinking and analysis, students seem to be able to motivate themselves better to remain in school when they can master basic skills and pass competency tests. The dropout recovery programs are particularly oriented towards the acquisition of basic skills, especially for older students who have too few credits for a regular diploma and who need to work towards a GED.

Instruction in basic skills is also an important adjunct to job training efforts aimed at dropout prevention or recovery. The literature in this area finds that job training alone is not sufficient to help dropout-prone youth and school dropouts complete school. However, job training, in combination with basic skills, enhances students' chances of finishing school and obtaining jobs requiring higher-level skills.

The Peninsula Academies in California best illustrate the strategy of integrating instruction in basic skills with technical training oriented towards careers in the computer and electronics fields. Students receive instruction in core academic courses that are tailored to providing students with the

skills needed to get and keep a job in these fields. This instruction is supplemented with vocational training and internships with local high-tech firms that are potential employers of program graduates.

CONCERNED ADULTS

Provide students with adults (teachers, counselors, volunteers) who can establish a personal relationship with them student and who can provide them with the support they need to deal with personal as well as academic problems.

Many students who drop out of school frequently do not have the parental support they need to help them with their personal and academic needs. Many also feel alienated by schools where they tend to get lost in a large, impersonal institution. Program staff stated time and again in this study that many students they worked with rarely had an adult who took an active interest in their academic progress and personal development. The program was the first opportunity for them to develop a relationship with an adult who cared and who could work closely with them to help them succeed in school.

The programs in this study designate different individuals to establish a one-to-one, "caring" relationship with students. At the Peninsula Academies in California, these adults are mentors from private industry; at Far Rockaway High School, they are case managers from a community-based organization providing support services to students in the school; in other programs, they are the students' teachers or counselors. In all programs, however, students are given the opportunity to work with an adult who takes an active interest in their personal development.

REINFORCEMENT AND FEEDBACK

Provide students with regular feedback about their progress to help stimulate improvements in school work and behavior.

Many students who drop out of school have developed a poor self-image because of their failure to make adequate progress in their school work. To address this problem, many of the dropout programs visited attempt to provide regular reinforcement of students' academic progress and rewards for significant improvements in their work or behavior.

Feedback is provided in several ways. In Project COFFEE, in North Oxford, Massachusetts, students receive a mark every day for the work they complete. Similarly, in the Model School Adjustment Program, peer tutors and classroom teachers fill out a report form every day in which students are rated on their work and behavior. When students receive a certain number of points, they are eligible for free passes to the movies or fast-food restaurants. Even some dropout recovery programs use regular appraisal of students' progress as a way to keep students going. A Denver high school participating in Colorado's Second Chance Program keeps a record of each student's academic progress and moves students to a higher level of work each time the student passes a skills test.

CAREER ORIENTATION

Link job training to long-term employment prospects in dropout prevention programs with a vocational component.

Many students with a history of school failure drop out of school because they are unable to see the linkage between education and future employment. Preparation for the world of work is therefore a central component of two dropout prevention programs visited in this study. The Peninsula Academies provide an integrated program of academic coursework and vocational training in computers and electronics that prepares students for careers with high-tech firms in the San Francisco Bay area. Through a collaboration with private firms such as Hewlett-Packard and Xerox, the program provides students with technical training, career counseling, internships, and work experience in the high-tech field. Project COFFEE also uses a collaborative arrangement with the Digital Equipment Corporation and other local companies to provide students with training and hands-on work experience in a number of career areas, including word processing, computer maintenance and repair, horticulture and agriculture, and building maintenance and repair.

In summary, the literature and the site visits identify a number of promising strategies and practices that could be used effectively to help dropout-prone youth remain in school and dropouts return to school to

complete their education. School officials, must, however, be flexible in incorporating these components into their own dropout prevention initiatives. They must recognize that different students may need different types of services to help them remain in school and that different program features may need to be adapted to their school's particular circumstances.

Recommendations for Federal Policy

The programs included for site visits in this study were selected, at least in part, because they provided empirical evidence to indicate that they were successful in addressing some aspect of the dropout problem. However, a review of information from nearly 500 dropout prevention programs found that very few programs maintain data on program effects. Moreover, even where schools do evaluate the effects of their programs, the evaluation results are generally based on weak evaluation designs. As a result, there is relatively little hard evidence about "what works" in dropout prevention. It can therefore be concluded that while the literature and the site visits suggest some promising practices for dropout prevention, most of the practices suggested above need further empirical validation before it can be established with certainty that they "work" and should be used more widely. It is therefore recommended that the Federal Government pursue the following policy to support the development of "effective" dropout interventions.

DEMONSTRATION PROGRAMS

The Federal Government should provide funding for demonstration programs to test the viability of alternative intervention models in preventing school dropouts.

PROGRAM EVALUATION	The demonstration program should incorporate a rigorous evaluation component that would assess the relative effectiveness of different types of interventions.
PLANNED VARIATION	The demonstration should included planned variation to determine the types of strategies that are most appropriate for different settings and different populations.

These steps will ensure the identification of interventions that have the greatest potential for success.

TABLE OF CONTENTS

Contents	Page
PREFACE	i
EXECUTIVE SUMMARY	iii
I. INTRODUCTION	1
Purpose of the Study	2
Literature Review	3
Site Visits to Effective Programs	5
Programs Selected for Study	6
Organization of the Report	8
II. FINDINGS FROM THE LITERATURE REVIEW	9
Current Dropout Prevention Programs	10
Target Groups for Dropout Programs	10
Motivated, High-Risk Students	10
Disinterested, High-Risk Students	11
Motivated Students with Special Problems	12
Motivated Dropouts	13
Program Purposes and Related Services	14
Academic Improvement	15
Attendance Improvement	16
Personal and Social Adjustment	18
Career Preparation	20
Providers of Services	21
School-Based Programs	22
Alternative Schools	23
Cooperative or Collaborative Programs	25
Non-School-Based Programs	26
Summary	27
Characteristics of Effective Programs	28
Limitations of Previous Studies	35
Implications of the Literature Review for Site Visits	36
III. FINDINGS FROM SITE VISITS	38
Approach to Site Visits	39
Program and Site Selection	39
Conduct of Site Visits	41
Overview of Programs	43
Target Groups and Program Objectives	43
Program Services	52
Academic Remediation	52
Counseling and Support Services	55
Career Orientation and Vocational Training	59
Summary	60
Key Components of Dropout Programs	61
Program Organization	62
Staff Characteristics and Interactions with Students	67

TABLE OF CONTENTS
(Continued)

Contents	Page
Program Services	69
Pupil Support Services	69
Academic Remediation	70
Vocational and Career Preparation	73
Summary	74
Strengths and Weaknesses in Program Delivery	75
Summary Observations About Dropout Programs	81
Principal Leadership	81
Staff Involvement	83
Integration	84
Multiple Services	85
Feedback and Reinforcement	86
School-to-School Linkages	87
Parent Involvement	88
School-Business Linkages	89
IV. CONCLUSIONS AND RECOMMENDATIONS	91
General Observations	91
Recommended Practices	92
Recommendations for Federal Policy	97
References	99
Appendix A. Staff Protocol: Program Background	
Appendix B. Staff Protocol: Key Program Elements	
Appendix C. Staff Protocol: Program Operations	

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I would also like to thank the many people associated with the programs we visited for making their programs available to us and for the time they gave to discuss the workings of these programs. Without their assistance, this study would not have been possible. A special thanks to Victor Herbert, Assistant Superintendent for Dropouts in the New York City Board of Education, for his assistance in conceptualizing dropout intervention strategies and permitting us access to two of the New York City high schools participating in that city's Dropout Prevention Program.

Joel D. Sherman

I. INTRODUCTION

Dropout prevention programs are not new to the education landscape. Some school districts have provided special services to meet the needs of potential dropouts for many years. One review of the dropout problem even suggests that "nearly every school district...reports at least one program that can be considered a dropout prevention program" (Center for the Study of Social Policy, 1986). These programs may be as simple as a special once-a-year counseling session or as complex as a high school reorganization that involves hundreds of pupils. But the central purpose of these programs is to assist students with poor attendance or academic performance return to and remain in school and receive a high school diploma or an equivalent certificate.

Widespread concern with the dropout problem has, however, stimulated the proliferation of dropout prevention programs in school districts across the nation in recent years. Developed partly in response to perceived local problems and, in some cases, in response to state requirements or special program funding, districts have begun to experiment with an array of new strategies to meet the academic, personal, social and vocational needs of potential dropouts and to help school dropouts return to school. States and the private sector have also become more involved with the problem. As of early 1987, at least a half dozen states had dropout prevention initiatives in place and several others were well along in their planning of dropout programs (Sherman, 1987). Several major foundations are also supporting a variety of prevention and recovery efforts.

These actions are clearly important steps in addressing a problem that appears to be increasing in national significance. There is not, however, unanimity about whether the experience with these programs provides sufficient evidence of "what works" to guide the direction of education policy at the Federal level. Some observers of dropout prevention programs argue that we still know relatively little about "what works" in dropout prevention and recovery (General Accounting Office, 1986; Intercultural Development Research Association, 1986). The Intercultural Development Research Association, for example, observed in their recent review of dropout prevention programs for the state of Texas that:

> Information on "what works" in dropout prevention is generally fragmented. While exemplary or model programs are in operation across the country..., there is little systematic and generalizable information which would permit program replication.

Other observers, while still cautious in their assessment of potential solutions to the dropout problem, suggest that there are a number of promising practices that schools might use in working with at-risk youth (Orr, 1987). Still others suggest that we currently know enough about what works in dropout prevention to develop strategies for dealing effectively with the dropout problem (Hahn and Danzberger, 1987).

Purpose of the Study

This study was undertaken for the U.S. Department of Education with funding from the Women's Educational Equity Act (WEEA) Program to identify strategies that are currently being used to address the dropout problem, to

assess the effectiveness of these strategies, and to suggest ways that these strategies could be implemented. Although the study was concerned with programs that serve dropout-prone youth and school dropouts, particular emphasis was placed on strategies for serving female students, many of whom drop out of school due to pregnancy or the need for child care. In this area, the study attempted to determine whether special techniques are used in regular programs to help female youth stay in school or whether programs deal with male and female students in similar ways. It did not, however, examine dropout prvention practices in programs that were specifically designed to serve female students, e.g., pregnancy and parenting programs, as these programs were reviewed in a separate study funded by the WEEA Program (Earle, Roach, and Fraser, 1987).

To achieve the objectives of the study, two main activities were conducted. The first was a review of the dropout prevention literature to identify practices that appear to be characteristic of effective programs and to guide the selection of programs to study in greater depth through site visits. The second activity consisted of a site visits to a sample of nine programs that show some evidence of success in addressing some aspect of the dropout problem. The programs selected serve students at different stages of their school careers and employ a variety of strategies to prevent them from dropping out of school or to help them return to school and complete a high school education or an equivalent certificate.

Literature Review

The literature review was designed to provide both background information about the dropout problem and to identify effective programs

that would be reviewed in greater depth through site visits. It therefore included four main components. These were:

- A review of national surveys and research studies of the dimensions of the dropout problem and the consequences of dropping out of high school for the individual and society;
- The collection from state education agencies of policies that states and school districts are currently pursuing to address the dropout problem;
- A review of research studies that have focused on the operations and effects of "successful" prevention and recovery programs; and
- A review of evaluations of different types of dropout prevention and recovery programs to identify effective program strategies.

We used the literature review in two important ways. We first used the review to develop an overview of the national dimensions of the dropout problem and to highlight differences in the scope of the problem among males and females. The results of this facet of the literature review were presented in Volume I of this report entitled, "Dropping Out of School: Causes and Consequences for Male and Female Youth." There we presented estimates of the number of male and female dropouts, similarities and differences in the characteristics of male and female dropouts and the reasons they drop out of school, and the consequences of dropping out of school for males and females.

We then used the literature review to identify the different types of strategies that are currently being used to address the dropout problem and to develop a typology of dropout programs that would serve as the basis for site visits and more in-depth program reviews. The review suggested different dimensions of programs that should be used to

differentiate programs in our site visits. These dimensions included:

- Program purposes;
- Program providers;
- Target groups for the intervention;
- Strategies of program provision;
- Setting for program services; and
- Types of services provided.

The review also helped identify some of the components and characteristics of programs that have been found to be "effective" in serving potential and actual school dropouts.

Site Visits to Effective Programs

Drawing on the review of research on "effective" dropout prevention strategies and practices, we next attempted to identify programs to study in greater depth. This involved several key steps. First, we contacted individuals who were knowledgeable about the dropout problem to ascertain information about dropout prevention and recovery programs. These individuals held positions in the following types of institutions:

- State and local education agencies;
- Offices of the Federal Government, including the Department of Education, the Department of Labor and the Department of Health and Human Services;
- Educational associations such as the Education Commission of the States, the Council of Chief State School Officers, the Council of Great City Schools, and the National Education Association;
- Foundations, including the Ford Foundation, the Carnegie Corporation, the Clark Foundation, the Kellogg Foundation and the Eisenhower Foundation; and
- Private organizations such as the Manpower Development Research Corporation, Public/Private Ventures, Cities in Schools, 70,001, the Institute for Educational Leadership, and the Intercultural Development Research Association.

Based on contacts with these organizations, we developed a preliminary list of potential programs to review in greater depth.

To broaden the base of programs, we obtained lists of state-funded or locally-funded programs from state educational agencies (SEAs) in each of the 50 states. We found that some states such as New York and Illinois had a relatively large number of dropout prevention programs -- many of them supported with state program funds, while others such as Vermont had relatively few programs. All told, we identified approximately 500 dropout prevention programs currently in operation in school districts in well over half the states around the nation.

We requested program descriptions and evaluations from each school district we identified as operating a dropout prevention program and obtained responses from approximately 200 programs. This group of 200 programs became the pool from which we selected programs for more in-depth review.

Programs Selected for Study

We selected from this sample nine programs for site visits to obtain information about the ways these programs are addressing the needs of potential and actual dropouts. This sample included seven dropout prevention programs and two dropout recovery programs whose purpose is to assist out of school youths return to school and complete a high school education or an equivalent certificate. The programs are:

Middle School Dropout Prevention Programs

- **Model School Adjustment Program** - a prevention program for sixth-graders in the Driftwood Middle School, Broward County, Florida that includes peer tutoring, individual and group counseling, and parent counseling;

- **Valued Youth Partnership** - a school-based youth tutoring program involving high-risk junior and senior high school students in San Antonio, Texas;

High School Dropout Prevention Programs

- **Dropout Prevention Program** - a program funded by the New York City Board of Education in ten high schools and 29 middle and junior high schools that involves both school reorganizations and a case management approach to student services;

- **Middle College High School** - an alternative high school in Queens, New York in which students take courses at a community college and receive intense personal counseling;

- **Peninsula Academies** - a program that integrates academic courses and technical training in computers and electronics in high schools in Menlo Park, California;

- **Project COFFEE** - a regional, occupational training and instructional program in North Oxford, Massachusetts;

- **Satellite Academies** - an alternative high school with four campuses in three boroughs in New York City;

Recovery Program for Dropouts

- **Educational Clinics** - a state-funded dropout recovery program in Washington State that involves diagnosis of students' educational needs and a short-term instructional program aimed at returning students to regular classroom programs or obtaining a General Educational Development (GED) certificate;

- **Second Chance Pilot Program** - a state-funded dropout recovery program operated by school districts in Colorado to prepare students for a regular high school diploma or an alternative certificate.

These dropout programs serve students of different ages and employ a variety of strategies to achieve their objectives for dropout-prone youth and school dropouts. It should be noted, however, that this study focused only on supplemental programs for the student population, rather than on a more comprehensive approach to the dropout problem. It did not focus on how effective schools or a fundamental restructuring of the schools could

attack the dropout problem -- even though some observers suggest that this may be the only real solution. The programs included here are designed to deal with the specific problems of dropout-prone youth and school dropouts -- not to address or correct the problems of schools. It is, of course, recognized that the success or failure of these programs has implications for the schools themselves.

Organization of the Report

This report examines programmatic responses to the dropout problem at the state and local level. (More detailed descriptions of the programs we visited are contained in Volume III, "Program Profiles.") In the next section of the report, we present the findings of our literature review on dropout prevention programs. Here we review the types of prevention programs available to dropout-prone youth, as well as the components and characteristics of effective programs. In Section III of the report we present the results of our site visits to successful dropout prevention and recovery programs. Here we provide a comparative description of the nine programs, including similarities and differences in program purposes and strategies, target groups, and the services provided. We also present our assessment of the key factors associated with different programs' success and our observations about the reasons these programs appear to be working effectively. In Section IV, we present our conclusions to the study and our recommendations for future actions by practitioners and policymakers.

II. FINDINGS FROM THE LITERATURE REVIEW

With increased public and media attention to the dropout problem, researchers and policy analysts have increasingly sought to identify effective strategies of dropout prevention and recovery. In the last year alone, at least a half dozen literature reviews have been prepared on the topic. Some of these studies simply identify practices that are currently being used to prevent students from dropping out; other studies suggest alternative strategies of dropout prevention; still others include recommendations that policymakers at different levels of government can pursue to deal more effectively with the dropout problem.

In this section of the report, we provide a review of the literature on dropout programs and an assessment of the current state of knowledge about what appears to be effective in dropout prevention and recovery. We organize the discussion into two components. First, we present an overview of the types of interventions schools and other service providers are using to meet the needs of dropout-prone youth and dropouts. We focus here on differences in the target groups for dropout programs, the objectives and strategies of these programs, and the providers of services in these programs. We illustrate these differences with references to programs included in our site visits and to other programs we considered for study in our review of program descriptions and evaluations. In the second part of the section, we review the characteristics and program components that have been found to be common to "effective" or "successful" programs.

Current Dropout Prevention Programs

School dropout programs differ significantly on a number of dimensions. They range in scope from small-scale supplementary services such as counseling, to comprehensive school reorganizations. They also differ significantly in their purposes and objectives, in the students they serve, and in the services they provide. Despite this variability, dropout programs can nonetheless be classified in ways that facilitate a comparison of similarities and differences among them.

Target Groups for Dropout Programs

Dropout prevention and recovery programs are designed to provide services for youngsters at different stages of the educational system. Some researchers have, however, classified the target populations for dropout programs into a number of discrete groups. Orr (1987), for example, suggests that dropout programs are designed to reach four specific target populations. These include:

- Motivated, high-risk students;
- Disinterested, high-risk students;
- Motivated students with special problems; and
- Motivated dropouts.

Motivated, High-Risk Students

This first group of students is made up of children who have characteristics and behaviors that are similar to those of school dropouts but who still maintain an interest in school. In general, these are younger children who, without adequate guidance and support, have the potential to lose interest and ultimately to drop out of school. School programs are designed to prevent such youngsters from becoming disenchanted with school

by addressing their academic, personal or family problems. One of the programs we visited, the Model School Adjustment Program in the Driftwood Middle School, Broward County, Florida, is an excellent example of such a program. The program is targeted each semester on 30 sixth-graders in a middle school who have had academic and behavioral problems in elementary school. It combines peer tutoring to help students master the skills required for promotion with peer and family counseling to help students deal with their personal and family problems. The program also provides services to students after they have completed the program to make sure that they continue to make progress.

Disinterested, High-Risk Students

A second target population is students who have not yet dropped out of school but show signs that they have given up on school and are likely to drop out. Signs of dropout behavior include excessive absences, cutting of classes, and frequent disciplinary problems. Programs for this population are designed to rekindle students' interest in school by demonstrating the value of school for the student's future success. This objective is pursued through several approaches. The Valued Youth Partnership in San Antonio, Texas, for example, uses role models and field trips to demonstrate the importance of school to youngsters. Oriented towards a largely Hispanic student population, the program brings speakers to the school who are successful in business, government, the arts, and academia. Students are also taken on field trips to broaden their exposure to the economic and cultural opportunities in the community.

Another program, Project COFFEE, in central Massachusetts combines academic instruction and on-the-job vocational experiences to establish a

linkage between school and the world of work. Students enroll in courses in word processing, computer maintenance and repair, horticulture and agriculture, distributive education, and building maintenance and repair, and receive real-world, hands-on experience in the field through internships with local businesses. The project also includes a strong collaborative relationship with the Digital Equipment Corporation which provides computer equipment for the program, teacher training, and internships for students.

Motivated Students with Special Problems

Still a third target group for dropout programs are students who are motivated to attend school but are unable to do so either because of family or economic circumstances or because they are unable to function well in a regular school setting. Several different programs have been developed to accommodate these different types of students' needs. An increasingly common program is the school-based day-care center for mothers of infants and young children. One of the high schools we visited to observe the implementation of New York City's Dropout Prevention Program, Roosevelt High School in the Bronx, provides such a center with funding from a private foundation. Girls who leave their children in the center are able to attend regular classes and still see their children during the course of the school day.

Another approach to the problem is to provide classes at times that fit better into students' work and personal schedules. Flexible schedules, including morning, afternoon or evening classes, and shortened school days are among the strategies that prevention programs use to accommodate students' diverse scheduling needs. Alternative schools and

classes are also provided to students who are over age for regular classes or who need a more individualized curriculum or learning environment.

Motivated Dropouts

A fourth target group for dropout programs consists of students who have dropped out of school but have decided they would like to continue their education. Many of these students, particularly those who have been out of school for some time, have found their employment opportunities to be limited without a high school diploma. They have therefore decided to complete their education, but not in the regular school setting. Two programs included in our site visits offer recovery services for school dropouts. The Educational Clinics in Washington State provide diagnostic testing and up to 135 days of instruction to students to help them complete a regular high school diploma or a GED. These privately-operated programs receive funding from the state based on the size of classes and the number of hours that students attend class. The Second Chance Pilot Program in Colorado supports similar programs in public school districts, with the main objective to assist students obtain a regular high school diploma.

Although dropout prevention and recovery programs are designed to meet the needs of youths who fall into each of the above four target groups, individuals are often selected for these programs based on a range of demographic, academic, or social characteristics that have been found to be highly correlated with dropping out of school (Orr, 1987). Demographic characteristics used for program selection would include low family income or poverty, an age factor such as being over age for grade, and such aspects of family structure as being from a single-parent

household. Academic factors would include low standardized test scores, failure of a large number of courses, or possibly class ranking. Finally, social characteristics would include excessive absence and truancy, discipline problems or suspensions from school, lack of personal motivation and self-esteem, or problems in interacting with teachers and peers.

Program Purposes and Related Services

The purposes and objectives of dropout prevention programs can be considered in two different ways. One is the level of the individual student who either has the characteristics of a potential dropout or who has behaved in ways that indicate the potential to drop out. At this level, dropout programs appear extremely varied, since their purposes or objectives are to meet the broad array of student needs. Some students, for example, may not be succeeding in their academic work due to a poor sense of self-esteem. To respond to this need, schools may set up a program whose immediate purposes are both to assist students master their academic work and to improve their self-image. The programs may take a variety of forms: peer tutoring, computer-assisted instruction with a teacher in a special classroom; special counseling or mentors who work with students on their academic and personal problems; or some combination of these services.

Other students with a history of failure in school may drop out during the transition from junior high to high school. To respond to this need, schools may develop a program to help students make this transition. The intervention may take the form of an outreach program to bring students in their last year of junior high school to a high school for an orientation to the school, or it may involve the use of family

counselors to visit the homes of at-risk youth to get parents involved in the transition process.

Still other students who are over age for their grade level may feel uncomfortable with younger students. To address this problem, schools may develop a program to provide special instruction to these students outside the regular classroom setting. Each of these school actions can be considered a dropout prevention program with a very specific set of purposes and objectives.

Looking beyond the level of the individual student, however, the objectives of dropout prevention programs tend to cluster into four broad areas: 1) academic improvement; 2) attendance improvement; 3) personal and social adjustment; and 4) career preparation. Although some programs focus exclusively on objectives in one of these four areas, many more programs are designed to fulfill a combination of academic and either personal or career objectives.

Academic Improvement

The main academic objective of most dropout prevention programs is to improve a student's academic performance sufficiently for him or her to attain a high school diploma or an equivalent certificate. However, as indicated above, most programs have shorter-range academic objectives that foster staying in school. In pursuit of these more immediate objectives, they use a variety of strategies, including:

- **Alternative Program Settings** such as schools-within-schools, alternative classes in mainstream schools, and alternative schools;

- **Alternative Curricula** such as individualized learning programs, a thematic organization of subject matter, or competency-based curriculum;

- **Alternative Instructional Techniques** such as computer assisted instruction, peer tutoring, learning contracts, and experiential learning through field trips and extracurricular activities.

In Exhibit 1, we delineate some of the intermediate academic objectives of dropout prevention programs and the program strategies that are frequently used to attain them.

Attendance Improvement

Many youths who drop out of school before completing high school have often developed poor habits of school attendance as early as elementary school. Consequently, one of the major objectives of dropout prevention programs is to get chronic absentees to attend school more regularly. At the elementary school level, this objective is most frequently pursued through the use of incentives and rewards. Students who have maintained perfect attendance for a week or a month or who have greatly improved their attendance may receive special awards or coupons for free sodas at fast food restaurants or free movie passes. These rewards may be supplemented with regular reports on attendance to parents or home visits by attendance officers to get parents to make sure that their children are attending school.

At the high school level, where there are many more students per school, dropout prevention programs have frequently used computerized attendance systems to monitor student attendance. One such system, currently in place in one of the New York City high schools included in our site visits, can monitor, on a daily basis, student absences from school and from individual classes, provide daily reports on each

EXHIBIT 1

ACADEMIC OBJECTIVES AND STRATEGIES OF DROPOUT PREVENTION PROGRAMS

Purpose/Objective	Strategy
To assist students who are unable to make satisfactory academic progress in the traditional school setting.	Alternative classes in mainstream school Alternative schools Schools-within-schools Smaller class size Individualized learning program Shorter academic schedule Combination work-study program
To assist students who are unable to master the traditional curriculum to complete requirements for high school graduation or an equivalent certificate.	Individualized learning program Remedial instruction Computer assisted instruction Peer tutoring Competency-based curriculum Preparation for a GED Experiential learning Field trips and extracurricular activities
To enable students with personal and financial needs that prevent them from attending regular classes to complete their academic requirements for graduation.	Evening classes Work-study program
To provide appropriate instruction for students who are over age and do not feel comfortable in classes with younger students.	Alternative classes Alternative schools Block programming
To permit students who have completed most requirements but need only a few credits for graduation to graduate or obtain an equivalent certificate.	Independent study Individualized learning program Preparation for a GED
To provide appropriate instruction for students suspended because of disciplinary infractions.	In-school suspension Alternative classes

student's attendance to a student's guidance counselor, and generate data for use in a computerized telephone system to notify parents of their child's absence from school.

In our review of program descriptions, we identified a number of programs that use different approaches to improving student attendance. The Whiteside County Truants Alternative Program in Illinois, for example, uses a casework approach to address the problem. Truant students are referred to a caseworker, who then meets with school personnel, the student, and his/her family to define expectations for behavior change. Program staff then monitor student attendance and remain in close contact with students' homes to apprise parents of developments in this area. Another program, the "ATTEMPT" program at Memorial Junior High School in Valley Stream, New York, funded as part of the New York State Education Department's Attendance Improvement/Dropout Prevention program, combines greater parent contact with a computerized data base to keep better track of student attendance and academic achievement.

Personal and Social Adjustment

Students who drop out of school frequently have a history of anti-social behavior that may be related to personal, family, and social problems. Many dropout prevention programs therefore attempt to assist students deal with these problems better, based on the assumption that improved personal and social adjustment will contribute at least indirectly to their academic progress and ultimately to school completion. The social and personal objectives of dropout prevention programs are varied, but five of the most common objectives are: 1) to develop self-awareness and self-esteem; 2) to develop understanding of feelings and

relationships with others; 3) to understand the consequences of school and life decisions; 4) to assist students cope with family and work problems; and 5) to improve rapport among students, teachers, and administrators and thus reduce the incidence of disciplinary problems and anti-social behavior.

A variety of approaches have been used in dropout prevention programs to help students attain these objectives. These include:

- Individual and group counseling;
- Smaller guidance counselor/pupil ratios;
- Mentors, buddies, or special resource personnel to assist in academic, personal and social problems;
- Release of teachers from other duties to provide counseling and more personalized relationships with pupils;
- Special assemblies, awards and honors;
- Adult volunteers to counsel students; and
- Use of social service personnel inside the school to provide services to students.

Several programs reviewed in the literature use one or more of these approaches to help students in their personal and social development. Twelve Together, for example, is a community-based program operated by the Metropolitan Detroit Youth Foundation (MDYF) that organizes 12 ninth-graders in Detroit high schools into weekly peer-counseling sessions. Six poorly-achieving and six academically successful students are selected to participate in a peer group. Led by two adult volunteers, the students learn to express their personal and educational problems and to find appropriate solutions. In contrast, the Cedarburg High School Teacher-Advisor Program in Cedarburg, Wisconsin, uses advisors to provide

personal support to students. The program assigns regular classroom teachers as academic advisors to all students in the school. Advisors monitor their students' academic progress through regular counseling sessions, parent-teacher-student counseling sessions, and daily homeroom meetings with students.

Career Preparation

Students who have not been successful in school and who show signs of dropping out, e.g., excessive absenteeism and truancy, failure to complete and pass courses, can sometimes be "reconnected" with school through courses that link their school work with the real world of work. Consequently, many dropout prevention programs, particularly at the high school level, are structured around career participation objectives. These programs again have multiple objectives -- often specific objectives designed to meet the particular needs of individual students -- but overall their objectives are to: 1) reinforce the value of staying in school by linking school attendance and completion to employment and career opportunities; and 2) to develop career awareness and employability skills through vocational courses and on-the-job observation and experience.

Career and vocational objectives of dropout prevention programs are frequently pursued through a combination of approaches and services. Career awareness is often developed through career counseling, seminars on employability skills, and job fairs. On-the-job experience is developed through internships with community service organizations and private employers or through a work-study experience. Student interest in staying

in school is often promoted through guaranteed employment. Individuals who complete a job training program may be guaranteed summer employment or an entry-level job upon completion of high school or an equivalent certificate.

Our review of dropout prevention programs again suggests the variety of ways that programs combine these service strategies to promote career development for dropout-prone youth. The Jackson Alternative School in Medford, Oregon, for example, provides students with half a day of academic classes and half a day of vocational training at their job site placements. Academics emphasize small group learning and individualized instruction. A vocational teacher recruits job sites, monitors student performance, and provides career instruction. The Alternative Education Work Centers operated in the Los Angeles Unified School District similarly uses academic and vocational training to enhance job opportunities. Each student has an individualized student education plan which identifies short- and long-term goals for the student designed to lead to some combination of high school completion or equivalency and job preparation skills. The centers provide classroom instruction in basic skills and high school subjects, job preparation skills and job training, along with on-the-job experience.

Providers of Services

Schools have historically been the primary -- if not the exclusive -- providers of dropout prevention services. Increasingly, however, as dropout rates have persisted at alarmingly high rates in large city schools, other providers, including other departments of government,

social service agencies, job training institutions, and private businesses, have entered the dropout prevention field. In some cases these institutions have received financial support from local governments in the area; in other cases they have received state and federal funding, including grants from the Department of Labor under the Job Training Partnership Act (JTPA), or funding from local or national foundations. In addition, schools and other providers are increasingly entering into collaborative arrangements under which schools and non-school agencies work together to provide a set of coordinated services for dropout-prone students and youth who have already left school. In some cases, non-school institutions are commiting materials and staff resources for schools to use in providing programs and services. In other cases, they are providing services to students directly.

Although it is difficult to delineate precisely the providers of dropout prevention services and the arrangements used to provide them, we use the following classification to suggest the range of different providers and settings for dropout prevention services. The classification includes:

- School-Based Programs;
- Alternative Schools;
- Cooperative/Collaborative Programs; and
- Non-School-Based Programs.

School-based programs remain the dominant arrangement for providing dropout prevention services. As is evident from the earlier discussion, these programs are designed to achieve a wide range of objectives and to serve a variety of target populations. The most common components of

school-based programs include academic remediation in the form of tutoring or individualized instruction, special counseling or support services, career awareness or vocational training, and special activities to promote parent involvement. What distinguishes a school-based program from other arrangements is that teachers and other regular school personnel provide all of the program services. In some cases funding for the program is part of the school district's regular budget, but in others cases special funding for the program is generated from state and Federal grants.

The Alternative Instructional Program in Kirby Junior High School in the Hazelwood School District in Missouri is illustrative of a school-based program that uses alternative instructional strategies to help low-achieving seventh- and eighth-graders improve their academic performance and ultimately to remain in school. A group of 60 students, assigned to classes of 15, follows the regular school curriculum. Teachers, however, use teaching strategies and learning activities that are designed to meet students' needs, including tutoring, lab work and audio-visual aids. They also create a dynamic interactive process to involve students, structure and clearly explain all work and avoid essay-type assignments that tend to frustrate students. Counselors conduct sessions on home study skills and regularly check homework for consistency.

Alternative schools have generally been developed by public school systems to provide students who have difficulty adapting to the regular school setting with an alternative learning environment that is more compatible with their learning styles. In addition to providing an alternative setting for student instruction, many alternative schools attempt to individualize the curriculum to match the particular needs of

each student. Students who are deficient in particular subject areas or in particular skills are provided with special instruction in these areas to help them pass their required courses and meet the school district's graduation requirements, although some alternative schools prepare students for an alternative diploma or a GED. Most alternative schools are organizationally part of a regular school district, employing regular program staff to provide instruction and support services. What mainly distinguishes the alternative school from a school-based program is its location in a separate facility and its greater individualization of the students' programs.

Alternative schools are now common in many school districts across the country. One example of such a program is the Metro Secondary School in Cedar Rapids, Iowa. The Metro School serves over 600 students aged 14 to 21 who have dropped out of conventional high school, focusing on basic skills, survival skills, career development, personal development, citizenship, and community service. In addition to a six-week orientation course in basic study skills and appropriate behavior, students take courses in basic skills, participate in a "vocademics" program, and obtain assistance in career planning through internships, vocational classes at a community college, and counseling about postsecondary programs and financial aid. Students receive credits based on attendance, work performance, and behavior, in lieu of grades, and work closely with an advisor who monitors their progress and serves as a liaison with the home. To graduate from Metro, students must complete a two-semester course in which they demonstrate their abilities in 15 competency areas ranging from reading to parenting.

Another program in Columbus, Ohio -- the North Education Center -- is an alternative school for at-risk students and dropouts aged 16 to 22. The program emphasizes an individualized, competency-based curriculum and flexible scheduling to provide students with the maximum number of possible options. The academic year consists of four terms of 42 days each and slightly shorter summer session, allowing students to accrue credits more quickly than in regular school and graduate at the end of any of the five sessions. In addition to its academic services, the program provides employment counseling and job placement services to all students and additional counseling for minority students.

Cooperative or collaborative programs are becoming increasingly common arrangements for providing dropout prevention services, as educators and policymakers recognize the need to address both students' academic as well as personal and family problems. Under cooperative programs, services are generally provided at the school site, frequently using a combination of school staff and the staff from an outside agency. Regular classroom teachers may, for example, provide instruction in academic coursework, while guidance services or vocational training may be provided by a social service agency, a job training institution, or a community-based organization. In some cooperatives or collaboratives, the school is merely a recipient of outside services. Its role is limited primarily to coordinating the school's services with those provided by outside agencies. In other collaborative arrangements, the school is a more active participant in the planning and implementation of the program, working closely with other service providers to ensure the most effective use of resources from all participating institutions.

Collaborations between schools and other agencies to prevent dropouts currently take varied forms and include different combinations of agencies and services. One such collaboration is Operation Success, a program developed in New York City as a pilot project by the Federation Employment and Guidance Service (FEGS) in the early 1980's and now a model program in New York's Dropout Prevention Program (DPP). Under this arrangement, the schools provide students with academic instruction, while FEGS staff provide different combinations of support services to program participants. These services include: a diagnostic vocational evaluation and assessment; personal and family counseling; educational internships; outreach services; training in vocational skills; part-time job development and employment; career development services; and treatment services. Some of these services are provided on the school site while others are provided at FEGS facilities.

Non-school based programs, while still relatively small in number compared with programs operated by schools, have also become increasingly common in recent years, particularly as foundations and other outside funding sources have gotten more involved in dropout prevention. The Summer Training and Education Program (STEP), for example, is a multi-year demonstration project initiated with the support of the Ford Foundation and now supported by other foundations, the Department of Health and Human Services, and the Department of Labor under JTPA. Managed by Public/Private Ventures, STEP aims to improve the life chances of 14- and 15-year-old disadvantaged youth by helping them remain in grade through graduation. Through a combination of work, remedial education, and instruction in life skills and opportunities during the summer months,

STEP seeks to improve basic academic skills, help reduce summer learning losses and the likelihood of becoming a teen parent, and encourage youth to remain in school. The demonstration project, which began operation in the summer of 1985 and will continue through August 1988, operates in five sites: Boston; Seattle; Fresno, California; Portland, Oregon; and San Diego.

A different type of dropout prevention program operated by a non-school agency is Twelve Together, a program begun by the Metropolitan Detroit Youth Foundation (MDYF) in 1982. Mentioned earlier in this section, the program forms support groups of 12 urban minority ninth-graders who meet 30 times a year, primarily for peer group counseling and tutoring. Through these techniques, the program attempts to help students overcome their academic and personal problems and make the difficult transition from ninth to tenth grade -- a period when many students drop out of school. In addition, MDYF is currently working to more than triple the number of Twelve Together groups both within and outside Detroit under a three-year initiative funded by the Department of Health and Human Services. The groups will be formed as a result of MDYF dissemination of materials, guides, videos, and training workshops.

Summary

In the past, dropout prevention efforts were concentrated primarily at the high-school level and schools were the primary, if not the exclusive, provider of program services. The situation is now much more diverse. Prevention programs directed at younger students are becoming increasingly common, as are recovery programs to bring school dropouts back into a regular high school program. Increasingly too, programs are

moving towards a more comprehensive set of program services. Although academic remediation remains at the core of most programs, efforts are currently under way in many schools to deal with the whole child by providing personal support services and better preparation for the world of work. Finally, the dropout prevention field is witnessing the entrance of new service providers, many with the specialized experience to help students deal with their personal, family, and vocational problems. In some cases, these new providers work as adjuncts to the schools to support them in their efforts to meet their students' needs; in other cases, they are working independently of the schools or as alternatives to them. The linkages between schools and other providers are, however, becoming more diverse and complex -- a trend that is likely to continue in the future as dropouts become an increasing concern at the local, state, and national levels.

Characteristics of Effective Programs

A major focus of the literature on dropout prevention has been to identify the characteristics of effective programs. Towards this end, many researchers have tended to use the following approach. First, they have reviewed program evaluations to identify programs that demonstrate some evidence of success either in improving students' attendance, increasing students' accumulation of credits or passing rates for courses, or decreasing the dropout rate. Following this review, programs that were determined to be "effective" or "successful" were then analyzed to identify the components or program features that were common across the

sample. This analysis was then used to produce an assessment of the characteristics of effective programs.

Several characteristics emerge consistently in the dropout prevention literature as features of programs that "work." We distinguish these into four areas: program organization; program staff; program services; and other program features.

In the area of program organization, several program features stand out as associated with success. (See Exhibit 2.) These include small size (Wehlage, 1983; High School Dropout Prevention Network of Central Michigan [HSDPNCM], 1985), program autonomy (Association of California Urban School Districts [ACUSD], 1985; Wehlage, 1983), and low pupil/teacher ratios (ACUSD, 1985; Hamilton, 1986; HSDPNCM, 1985). Many students who have not met with success in the regular school program have been alienated by a large, bureaucratic system that does not respond to their unique needs. The research suggests that these students may function better in smaller classes where teachers can relate to students more personally. In such an environment, students develop the feeling that somebody cares about them and will work with them to both improve their academic skills and help them deal with personal problems. In some cases, research suggests that it may be desirable to locate these classes outside the regular school setting to remove students from an environment that may contribute to poor attendance and academic failure. For other students, programs can be located in the regular school setting, as long as they provide for more individualized instruction and more personalized pupil-teacher interactions.

EXHIBIT 2

CHARACTERISTICS OF "EFFECTIVE" DROPOUT PROGRAMS

	Association of California Urban School Dropouts	Center for Study of Social Policy	Stephen Hamilton	High School Dropout Prevention Network of Central Michigan	Intercultural Development Research Association	National Center for Research Vocational Education	Gary Wehlege
Program Organization							
Program Autonomy	X						X
Small Program Size				X			X
Location Separate from Regular School			X				
Low Pupil/Teacher Ratio	X		X	X			
Program Staff							
Motivated, committed teachers	X			X	X	X	X
Trained teachers	X	X		X			
Clear goals, expectations	X				X		X
Teacher autonomy				X			
Program Services							
Academics							
Individualized instruction	X		X		X	X	X
Focus on basic skills	X	X			X	X	
Modified curriculum	X	X			X	X	
Block programming		X					
Work-study					X	X	
Experiential learning	X		X				X
Personal/Social							
Small pupil/counselor ratio		X	X				
Effective counseling					X	X	
Peer counseling	X						
"Family" atmosphere	X	X				X	X
"Survival" skills					X	X	
Attendance							
Incentives		X					
Other Program Features							
Parental involvement	X			X		X	
School-business collaboration				X	X	X	
Early intervention		X					
Community involvement	X			X			
Program evaluation							
Preparation for employment	X	X	X			X	

In the area of program staff, most reviews cite motivated, committed teachers as key to program success (ACUSD, 1985; HSDPNCM, 1985; IDRA, 1986; National Center for Research on Vocational Education [NCRVE], 1986; Wehlage, 1983). This characteristic is consistent with the program organizational characteristics discussed above in that it suggests the need for program staff who are able to work effectively with and who are committed to working with a more difficult-to-educate population. At least one review also identifies teacher autonomy as associated with effective programs (HSDPNCM, 1985). The rationale here is that teachers need to have the latitude to experiment with different instructional approaches, learning materials and styles of interaction to determine which are most effective in meeting the academic and personal needs of individual students.

Program services that are characteristic of effective dropout prevention programs tend to be in the academic and personal/social domains. In terms of academics, the literature consistently finds that individualized instruction (ACUSD, 1985; Hamilton, 1986; IDRA, 1986; NCRVE, 1986; Wehlage, 1983), a modified curriculum that responds to students' abilities and needs (ACUSD, 1985; Center for the Study of Social Policy [CSSP], 1986; IDRA, 1986; NCRVE, 1986), and a focus on basic skills (ACUSD, 1985; CSSP, 1986; IDRA, 1986; NCRVE, 1986) are key components of effective programs. Other reviews of the literature suggest additional academic components that appear to be associated with program success. These include block programming (CSSP, 1986), experiential learning (ACUSD, 1985; Hamilton, 1986; Wehlage, 1983), and a combination program of work and study (IDRA, 1986; NCRVE, 1986).

Block programming has been used in some programs at the junior high school and high school levels as a way to create a "family" environment for students. Under this arrangement, students take the same courses and move together as a group from class to class. They therefore have the opportunity to get to know both their fellow students and teachers much better and to develop a support system to help them with their academic and personal problems.

Experiential learning and work-study programs are both designed to help students understand that school work has real utility outside the classroom. Through experiential learning, students "learn by doing." They apply their classroom knowledge in practical, day-to-day situations. Work-study programs generally involve a more flexible schedule so that students can both work and attend school. In the better programs, students' coursework is related to their job to make the school experience more meaningful to them.

In addition to academic services cited above, the dropout prevention literature identifies several personal and social services that are common to effective programs. These include effective counseling and the development of "survival skills" (IDRA, 1986; NCRVE, 1986). Effective counseling can be achieved using a variety of techniques, among them, small pupil-guidance counselor ratios and peer counseling. As indicated above, many students who drop out of school need a person who really "cares" about them and will spend time helping them with their problems. This person could be a teacher, a counselor or another adult who can take an interest in the child. Where this person is a counselor, that person must have a small caseload of students so that he or she is able to relate

to the child on a one-on-one basis and develop a "caring" relationship. The person could also be a fellow student who is having similar experiences as the troubled student. In one of the programs included in our site visits, the Model School Adjustment Program in Broward County, Florida, several students indicated that peer counseling was a great help to them, since their peer counselors could really relate to the problems they were facing both in school and at home.

Although academic and personal/social services are consistently identified as key to the success of dropout prevention programs, other program features have also been mentioned in one or more studies as associated with successful programs. These include preparation for employment (ACUSD, 1985; CSSP, 1986; Hamilton, 1986; NCRVE, 1986), parental involvement in the student's educational program (ACUSD, 1985; HSDPNCM, 1985; NCRVE, 1986), community involvement (ACUSD, 1985; HSDPNCM, 1985), and school-business collaboration (HSDPNCM, 1985; IDRA, 1986; NCRVE, 1986). As stated above, there is little guidance in the literature about the best ways to structure these components. Some researchers do, however, suggest areas that program designers need to be attentive to in developing collaborations between schools, other public and private agencies, and the private sector. Smith (1987), for example, stresses five elements for program designers to consider in structuring an interagency collaboration:

- **People** - Designers of collaborations must know who they have to work with and whether these people are in the right positions for the task.
- **Interests** - Program designers must recognize that participants in the collaboration may have different interests, even though they may share the same goal. Unless ways are found to deal with "turf" issues, the collaboration will not succeed.

- **Agreements** - Another aspect of successful collaborations is definitive agreements about what is going to be done, by whom, and during what time period. Ambiguity about roles and responsibilities may create difficult working relationships and unrealistic expectations for the program.

- **Capacity** - Related to agreements is the capacity of the institutions to carry out their responsibilities. For collaborations to be successful, it is important to recognize the strengths and limitations of participating organizations and their ability to carry out their responsibilities.

- **Resources** - Successful collaborations require a relative balance in the contribution of resources by different participants. Where program responsibilities fall inordinately on only one or two collaborators, or where participants fail to provide the resources required of them, the potential for failure is greater than where the contributions of all participants are more equitable.

In summary, a variety of program components or characteristics have been found to be associated with effectiveness in dropout prevention. These include aspects of program organization, staff, and services, as well as relationships with parents and non-school institutions. It is important to note as a concluding observation that many of these components are characteristic of effective schools more generally, not just dropout prevention programs. Corcoran and Wilson (1986), for example, in their review of secondary schools cited for excellence by the U.S. Department of Education, find that several of the characteristics of effective dropout prevention programs are also found in effective secondary schools. These include teacher autonomy in doing their work in a culture of collegiality, positive student-teacher relationships fostered through one-to-one instruction and informal meetings during the course of a day, and a high degree of involvement by parents and community members in school affairs. The characteristics of effective dropout prevention programs are also consistent with the recommendations of the Department of

Education to improve the education of disadvantaged students (1987). These recommendations include the tailoring of instructional strategies to the needs of disadvantaged children -- partly through smaller class size and more individualized instruction, and the encouragement of greater parental involvement in their children's education.

Limitations of Previous Studies

Although studies of dropout prevention programs provide some guidance about the characteristics of effective programs, these studies are limited in several respects. First, many of the evaluations lack sufficient rigor to establish definitively that the program is effective. As a result, judgments about program effectiveness are quite often subjective, rather than based on solid empirical data. Moreover, even where programs are designed to achieve similar objectives, they are often evaluated using different methodologies. It is therefore difficult to compare programs to determine whether one approach is more successful than another in achieving that objective.

Another limitation of the research is that even where program components or characteristics have been identified as common to effective programs, the literature generally does not discuss the way implementation of these components has contributed to program success. For example, parental participation has been identified as a characteristic of effective dropout prevention programs. But parental participation can take a variety of forms. The literature does not, however, suggest ways that parental participation can be structured to contribute most effectively to dropout prevention.

Finally, many reviews of the literature identify more than one component or characteristic to be common to effective programs. These may include individualized instruction, special guidance services, or employment incentives. Other studies suggest that it is a combination of components that produces effective programs. The research does not, however, indicate whether certain components alone are sufficient to produce an effective program or what mix of different program features is needed to produce success in dropout prevention. It is therefore difficult for program designers to use the research to develop prevention programs and be sure that a particular program design will inevitably produce success.

Implications of the Literature Review for the Site Visits

The lack of rigor in previous studies of dropout prevention programs structured the approach we used to conducting site visits in this study. To address some of the methodological weaknesses of previous studies, we conducted the following activities:

First, we attempted, to the extent possible, to include for study programs that had some empirical data to support the program's success in addressing the dropout problem. Although the evaluation data varied from program to program, they generally provided some evidence that the programs were effective in meeting their program goals. Second, we attempted to vary programs on a number of dimensions, e.g., level of intervention, type of provider, to reflect different combinations of program services. This selection process was used to help us assess whether individual program components alone were sufficient to ensure program success or whether different combinations of components were necessary to produce an

effective program. Finally, we structured our inquiries of program staff to shed as much light as possible on the program components they thought to be most critical to program success and on the ways these program components can best be implemented. In the next section, we describe our approach to the site visits and the conclusions that can be drawn from them for designing successful dropout programs.

III. FINDINGS FROM SITE VISITS

The dropout prevention literature provides some key insights into potential ways to structure effective interventions to help at-risk youth complete their high school education. Using these insights, our approach to conducting site visits was developed to expand our knowledge of "what works" in dropout prevention. In particular, it was designed to learn more about the key elements of effective programs and how these elements can best be implemented in practice. To achieve these purposes, we sought out a sample of dropout prevention and recovery programs that used different strategies to address the problem and which had some evidence of success in preventing dropouts or in helping dropouts return to school and complete their education. We then conducted site visits to these programs that included interviews with program staff and program participants to learn more about the ways these programs were structured and how the experience with these programs could be used in other settings to structure successful interventions.

In this section of the report, we present the findings from the site visits. We begin the section with a discussion of our approach to the site visits, focusing on the procedures we used to select programs and sites and the methods used to conduct the visits. This is followed by a brief overview of each of the nine programs and a comparative analysis that focuses on their similarities and differences. In the comparative analysis, we describe the programs' target groups and objectives and the services the programs provide. Following this overview and comparison, we discuss the key elements of the programs, focusing primarily on staffs'

assessments of the factors that contribute to program success. We conclude the section with some general observations about the programs and the implications of these observations for future development of dropout prevention and recovery programs.

Approach to Site Visits

Program and Site Selection

In developing our sample of dropout prevention programs for site visits, we attempted to select only programs that were able to demonstrate their success with solid evaluative data. This was not an easy task to accomplish. Although we requested descriptive and evaluative data from over 500 programs, we received evaluation data from only 50 of the 200 programs that responded to our request. Moreover, the data that we did receive were, for the most part, not convincing; that is, they were not generated based on rigorous evaluations and did not provide definitive evidence that the program was succeeding in improving attendance or academic performance, increasing graduation rates, or reducing the dropout rate. Fewer than 20 programs were able to submit sufficient data for us to feel confident that the program was having an effect.

Using this sample of 20 programs as our selection pool, we then took the following additional factors into consideration in making our final program selections. First, we included only programs whose central purpose was dropout prevention, rather than dropout recovery. We therefore eliminated from consideration job training programs, many of which are supported by the Department of Labor through the Job Training Partnership Act (JTPA). We did, however, include two dropout recovery programs, the

Educational Clinics in Washington State, and the Second Chance Pilot Program in Colorado, as these initiatives have received a great deal of public attention in recent months. Moreover, both programs promote dropout recovery through a publicly-funded system of educational choice.

Second, we selected only programs in grades 6 through 12, eliminating from consideration programs at the elementary and pre-school levels. Although we recognized that some research on dropout prevention highlights the need for early intervention to "nip the dropout problem in the bud," we felt that it is often difficult to distinguish dropout prevention programs from more traditional compensatory education programs at the elementary school level. We therefore included only middle and high school programs whose specific purpose was dropout prevention.

Third, we attempted to include programs that reflected the broad range of providers of dropout prevention services -- not just public schools. Although we selected a majority of programs from public schools, since schools are currently the major providers of services for dropout-prone youth and are likely to continue to be involved in dropout prevention efforts in the future, we also attempted to include such non-school providers as social service agencies, community-based organizations, and others, since these types of organizations have become increasingly involved in dropout prevention.

Fourth, we selected programs that varied on a number of dimensions to try to ensure that the strategies we examined could be applied to students with different needs and characteristics and used in different types of settings. Among the characteristics on which the programs varied were:

- Program purposes;
- Program strategies;
- Program size, as measured by the number of students served;
- Age and characteristics of students served;
- Program location, i.e., urban, suburban, rural;
- Types of services provided and combination of services provided.

Although we recognized that it would not be possible to vary programs on all of these dimensions, we attempted to maximize program differences to the extent possible.

Fifth, in order to contribute new insights into strategies for addressing the dropout problem, we included in our sample of programs not only ones that have received wide coverage in professional circles and the popular media, but programs that are also less well known. The programs selected for study therefore reflect a balance between the two. We excluded such well-publicized initiatives as the Boston Compact and Cities in Schools, not because they do not present good models of dropout prevention, but rather because so much has already been written about them. We did, however, include a few well-known programs in the sample to assure some diversity in dropout prevention strategies.

Conduct of Site Visits

Site visits were conducted to the nine dropout prevention and recovery programs selected for study during the three-month period from March through May 1987. In the case of a number of programs, the field work involved visits to more than one project site. Washington State, for example, currently supports Educational Clinics at eight different private institutions. To get a feel for the diversity in clinics' structure

and services, we visited four separate clinics, each of which used a slightly different approach to serving high school dropouts. Similarly, in New York City we visited two of the ten high schools receiving funding under the Dropout Prevention Program and in Colorado we visited two high schools operating dropout recovery programs under the Second Chance Pilot Program.

The site visits involved interviews with program directors, school principals and program administrators, teachers, other professional staff such as guidance counselors and social workers. The interviews with staff were structured around a set of protocols that were designed to elicit open-ended responses to questions on specific topical areas. The primary staff protocol, which is attached to the report as Appendix A, focused on the following topics:

- Program Background and Development;
- Program Objectives;
- Selection of Students;
- Program Services;
- Procedures for Matching Students with Services;
- Unique Program Features;
- Program Administration and Finance; and
- Program Effects.

Two additional protocols were also used to elicit information from staff about the key elements of the program and the way the program was operating in practice. (These are attached to the report as Appendices B and C.) In the first additional protocol, program staff were asked to assess the importance of a variety of program components to the success

of their own program. The program components included in the protocol were ones that had been identified in the literature as key elements of dropout prevention programs. After respondents ranked components on a scale from unimportant to very important, a composite assessment of the relative importance of different program components was developed.

In the second additional protocol, staff were asked to assess how well the program was working in different areas, e.g., attracting competent staff, matching services with student needs, again using a scale that, for this set or questions, ranked program operations from extremely successful to extremely unsuccessful. These responses were designed to elicit ways that successful components of the program could be replicated in other settings and how other programs might overcome some of the problems in operating this type of dropout prevention program. After ranking the program's strengths and weaknesses in different areas, staff were then asked follow-up questions to provide support for their assessment.

Overview of Programs

The dropout programs included in this study represent a range of different approaches and strategies for helping at-risk youth and dropouts complete their education and prepare for employment. In Exhibit 3, we provide a sketch of each program that includes a brief statement of the program's objectives, as well as a description of the program's target groups, and the services these students receive. We provide more extensive program descriptions in Volume III: "Program Profiles."

Target Groups and Program Objectives

Although all of the programs included among our case studies are designed either to prevent students from dropping out of school or to

EXHIBIT 3

OBJECTIVES, TARGET GROUPS AND PROGRAM SERVICES
IN SAMPLE DROPOUT PROGRAMS

Program	Objectives	Target Group	Program Services	No. Students Served
Valued Youth Partnership (San Antonio, Texas)	Improve self-concept, school citizenship, attendance, and basic skills achievement; keep students in school.	Junior high school and high school students in 6th to 12th grades with the following characteristics: 1) lack of interest in school; 2) a below average academic record; 3) frequent absences; 4) repeated disciplinary action; 5) unsociable behavior in school; 6) lack of clear-cut goals.	1) Instruction for tutors in interpersonal communication skills, language arts, child growth and development, self-image and motivation; 2) Tutoring with minimum wage pay; 3) Field trips in the community; 4) Role modeling; 5) Parent conferences and home visits.	150 students per per year
Model School Adjustment Program (Broward County, Florida)	Increase academic achievement and develop positive changes in behavior.	Sixth grade students with a history of low standardized achievement test scores, poor grades, difficulty in basic skills and behavioral problems.	1) Peer tutoring; 2) Peer counselling; 3) Family counselling.	30 students per semester
Project COFFEE (North Oxford, Massachusetts)	Prepare at-risk students to take a responsible place in the adult world of work, family, and leisure.	High school students who have been unable to perform satisfactorily in a regular day high school and who are judged to have a high probability of dropping out.	1) Occupational training; 2) Basic skills instruction integrated with the occupational program, including individualized and mastery learning; 3) Individual and group counseling; 4) Pre-employment preparation; 5) Adaptive physical education.	120 students per quarter
Peninsula Academies (Redwood City, California)	Assist educationally disadvantaged students not succeeding in traditional school programs finish school and obtain employment skills; Meet vocational training needs of students for positions in electronics and computers in local companies.	High school students in grades 10-12 with: 1) reading and math ability at a minimum of the 6th grade level; 2) economic or educational disadvantagement, underachievement, irregular attendance, disinterest in the academic program.	1) Integration of academic and technical courses to develop employment skills in electronics and computer fields; 2) Individualized and small group instruction; 3) Special counseling; 4) Monitoring of student attendance and performance; 5) Exposure to career information through field trips, guest speakers, mentors, and industry-loaned instructors; 6) Job opportunities and guarantees; 7) Frequent parent contact.	190 students per year

EXHIBIT 3
(Continued)

Program	Objectives	Target Group	Program Services	No. Students Served
Middle College High School (New York City)	Develop realistic career goals by acquiring process skills and knowledge of self; Develop educational plans leading to career and life goals; Develop positive sense of self-esteem; Develop job skills; and Obtain exposure to world of work and develop job-coping skills.	Tenth-grade students with minimal high school credits, who are below grade level in reading and math, have a record of subject failure and absenteeism, and have social or emotional problems.	1) Thematic organization of core academic curriculum; 2) Career education; 3) Cooperative internship in a social service agency; 4) Career education supervisor who serves as career and personal counselor; 5) Enrollment in college courses.	450 to 500 students per year
Dropout Prevention Program (New York City)				
Roosevelt High School	Prevent dropouts by restructuring the 9th grade to create smaller learning environments and to develop increased personal contacts between adults and students.	Ninth-grade students.	1) Reorganization of schools into smaller clusters organized around curriculum areas or student characteristics; 2) Smaller pupil/teacher ratios; 3) Special support services including guidance counselors and family paraprofessionals; 4) After school classes to accommodate students' family responsibilities; 5) Other counseling, health and vocational services.	1,500 students in 9th grade (cluster program to be extended to upper grades)
Far Rockaway High School	Prevent students from dropping out through use of a case management approach designed to provide assistance to students at the school site to help them deal with problems that could contribute to them dropping out of school.	High school students with excessive absences, subject failure and poor attendance/academic records in junior high school.	1) Case management approach to providing special services for at-risk youth; 2) School mediation to mitigate student conflicts and provide an alternative to suspension for disciplinary incidents.	200 students

EXHIBIT 3
(Continued)

Program	Objectives	Target Group	Program Services	No. Student
Satellite Academy	Increase academic achievement; Foster emotional growth and development; and Facilitate career exploration and preparation.	High school students who have been unable to succeed in a regular school program.	1) Individual student contract for work and credits; 2) Student advisors for 15-20 students to help with concerns, monitor progress, maintain parent contact; 3) Job internship in a field of interest.	700 to 800 on four cam
Educational Clinics (Washington State)	Enable dropouts to: Reenter a regular school program; Complete a GED; or Gain employment.	Students aged 13 to 19 who have dropped out of school for at least one month or who have been expelled or suspended from school.	1) Diagnosis of students' educational abilities, skills and deficiencies; 2) Short-term program of individualized instruction focused on basic skills; 3) Career orientation and awareness.	Clinics ran enrollment 10 to about
Second Chance Pilot Project (Colorado)	To assist students who do not succeed in the educational system with a second change to obtain either a high school diploma or an equivalency certificate.	High school dropouts aged 16 to 21.	1) Diagnosis of students' skills and needs; 2) Individualized education plan with a learning contract; 3) Individualized instruction oriented to competency attainment, high school completion, or a GED.	507 student centers sta

assist school dropouts to complete a high school education, the programs differ somewhat in the students they serve and in their specific program objectives. Two of the programs, the Model School Adjustment Program (MSAP) in the Driftwood Middle School in Broward County, Florida and the Valued Youth Partnership (VYP) in San Antonio, Texas are characteristic of prevention programs that focus on children with behaviors that are similar to dropouts but who still maintain an interest in school. The MSAP works with younger children -- sixth-graders, the VYP with both junior high school and high school students in sixth to twelfth grades, but both work to improve students' self-concept, develop more positive school behaviors, and increase students' academic achievement.

The MSAP and VYP program approach these objectives through a variety of techniques, but tutoring is a common element of both programs. In the VYP program, junior high school and high school students tutor elementary school children at minimum wage pay as a means to enhance their self-esteem and to improve their own academic skills; in the MSAP, sixth-graders with a history of low grades and test scores and behavioral problems receive tutoring in academic subjects three periods per week from seventh- and eighth-graders outside the regular classroom setting. Both programs also rely heavily on parental involvement to improve the prospects that at-risk students will remain in school. In the VYP program, this is done through parent conferences and home visits; in the MSAP, this is done through family counseling sessions in which parents are instructed in ways to help their children deal with their academic, family and personal problems.

Several of the other sites represent intervention programs that target students who have begun to show signs of disaffection with school

and [redacted] manifest behaviors that frequently precede actual dropping out. While these programs all focus on dropout prevention, their more immediate objectives differ somewhat in emphasis. Three of these programs, Project COFFEE in North Oxford, Massachusetts, the Peninsula Academies in Redwood City, California, and Middle College High School in New York City, all have as a primary objective, preparing students to take a responsible position in the world of work. Project COFFEE provides students who have had difficult adjusting to the regular school environment with the opportunity to complete high school in an alternative setting. The program places a heavy emphasis on occupational training and pre-employment preparation, in addition to basic skills instruction.

The Peninsula Academies attempt to develop employment skills through alternative classes in the regular high school. The program also features an integration of academic and technical classes in the electronics and computer fields, career orientations through field trips, mentors, and instruction from industry-loaned instructors, and job guarantees for program graduates. Middle College offers still a third setting to at-risk youth -- a college campus -- to help them develop realistic career goals and develop job skills. In this unique setting, students are offered courses in career education and cooperative internships in social service agencies in addition to a thematic approach to their core academic curriculum.

The other dropout prevention programs in our sample, Satellite Academy and the two high schools participating in New York City's Dropout Prevention Program -- Theodore Roosevelt High School in the Bronx and Far Rockaway High School in Queens focus heavily on personal and social

development as part of the process of improving students' academic performance and keeping students in school. Satellite Academy is characteristic of the alternative schools that were established in the late 1960s and early 1970s. It is designed to provide students who have been unable to succeed in a regular school program with an environment that is more compatible with their needs and learning styles. Through the use of individual contracts for work and credits, and mentors who work to establish a close relationship with students, Satellite attempts to assist students increase their emotional growth and development, improve their academic achievement, and ultimately complete high school.

Far Rockaway High School uses a case management approach to assist students deal with problems that would contribute to their dropping out of school. A community-based organization (CBO) consisting of a case manager and a team of human service workers is employed at the school building to provide high-risk students with a variety of support services or to refer students to services where they are not available at the school site. The case manager is an adult who works closely with students to identify the causes of his or her difficulties and to structure a set of services that best meet these needs. By establishing a close personal relationship with the student, the case manager attempts to create the conditions that will help students succeed in their personal lives and ultimately to remain in school.

Finally, Theodore Roosevelt High School in the Bronx takes still a different approach to meeting students' personal, family and social needs. Rather than working with a small group of students, the school has reorganized the ninth grade to create a more personalized environment for

all students. The reorganization involved the creation of eight small schools or clusters for incoming ninth graders, each organized around either a special curriculum area, e.g, the business institute, college discovery, or student academic needs, e.g., bilingual education. Each school or cluster has between 175 and 200 students along with a staff that consists of a coordinator/teacher, guidance counselor and two family paraprofessionals who are available to focus on the concerns of individual children. In addition, the school employs a community service organization that is funded through the Dropout Prevention Program to provide special programs in child care, pregnancy prevention, and drug rehabilitation for students requiring these services.

While dropout prevention is the major objective of most of the programs included in our sample, two programs we visited are specifically designed as recovery programs whose purpose is to bring out-of-school youth back into an education program. The Educational Clinics in Washington State are targeted on youths aged 13 to 19 who have dropped out of school for at least one month or who have been expelled or suspended from school. The Clinics are designed as short-term interventions to enable dropouts to reenter a regular school program, complete a GED or gain employment. They use a clinical model to achieve these objectives. This involves a diagnosis of students' educational abilities, skills, and deficiencies, a short-term program of individualized instruction focused on basic skills, and activities to develop career orientation and awareness. Several clinics are operated by private organizations in various locations in Washington, each of which uses a somewhat different approach to the general "clinic" model.

A second dropout recovery program we visited, the Second Chance Pilot Program funded by the state of Colorado, is targeted on slightly older students than the educational clinics, i.e., youth aged 16 to 21. Its objective is to give students who do not succeed in the regular education system a second chance to obtain a high school diploma or its equivalent. Like the clinics, the Second Chance Program also involves a diagnosis of students' skills and needs, individualized instruction oriented towards competency attainment, and the use of learning contracts to keep students working towards their academic goals. Within this overall program framework, however, different projects approach the dropout recovery problem in different ways.

In summary, the dropout prevention and recovery programs included in our sample serve students of varied ages and pursue a range of objectives. The students served range from sixth-graders with the characteristics of potential dropouts to young adults who have been out of school for varying periods of time. Most of the programs include an academic objective -- frequently the attainment of basic skills and/or the mastery of certain competencies -- so that students can complete the requirements for promotion and high school graduation, or for older students a GED. However, many of the programs also have behavioral or vocational objectives -- although the relative emphasis on these other objectives varies across programs. Some programs focus primarily on behavioral objectives, others on vocational or career objectives, still others on some combination of objectives.

Program Services

Academic Remediation

The typical student in our sample of dropout programs is deficient in basic skills in reading, writing, and computation. Many have repeated at least one grade because of failure to pass skills tests required for promotion. To get students back on track, therefore, academic remediation has generally been included as a program component. Several strategies of remediation are used.

Tutoring is one such strategy, which, as stated previously, is a key feature of the Model School Adjustment Program (MSAP) and the Valued Youth Partnership (VYP). The MSAP uses a peer tutoring model. Thirty sixth-grade students selected for the program each semester spend three hours per week outside the regular classroom in tutoring sessions with seventh- and eighth-graders who are strong academically and can serve as role models for them. The tutoring sessions are designed to teach students the subject-area skills needed to pass skills tests for grade promotion and help students master material in their regular classes. The content of the classes is worked out in advance by the program director and the classroom teachers so that tutors know what they will be teaching in each session. The sessions are scheduled so that students are not pulled out for tutoring from the same subject class more than once a week and thus do not miss their regular classroom instruction.

Evaluation is a central element of the tutoring process in the MSAP. Tutors fill out evaluation reports after each session and grade tutees on their work and behavior. This provides tutees with immediate feedback and, in combination with teacher evaluations, enables them to qualify for special prizes and awards for good performance.

The Valued Youth Partnership (VYP) in San Antonio is another program that uses tutoring to improve students' academic skills and to enhance their sense of self-esteem. High school and junior high school students selected for the program conduct tutoring sessions at an elementary school close to their home school. Students tutor four to five hours per week and are paid the minimum wage ($3.65 per hour) for their services. To prepare them for the programs and to develop their skills as tutors, students take a training course one day a week for one hour in place of one of the regular tutoring sessions. The course is designed to develop interpersonal communication skills, reading and writing skills, and knowledge about child development.

Another approach to academic remediation is a program of individualized instruction where students complete work at their own pace. This approach is employed at several of the Educational Clinics, the dropout recovery program in Washington state where many students are preparing for a GED, and in a number of schools participating in Colorado's Second Chance Pilot Program, where students are generally working to complete a regular high school diploma. The Center for Human Services (CHS) uses this approach for both types of students. Students who apply for the program are given a diagnostic test at the time of application to determine their placement and to establish their program of instruction. They are then assigned either to a high school reentry class or a GED preparation class that contains between five and ten other students. Classes meet three hours a day for five days a week. During class, students generally work independently to complete assignments in their program of instruction, although at least one lesson a day in the reentry class,

usually in social studies, reading, or science is a whole-class lesson that involves an exchange between teacher and students. Students are tested regularly in both types of classes to assess their progress and to schedule GED testing for students who are prepared for different portions of the exam. ECS and other clinics offer students up to 135 days of instruction (the maximum allowed for reimbursement by the state through the Clinics program), but will often keep a student on without state reimbursement when a student wishes to continue in the program.

Still another strategy for improving students' educational performance is to link academic coursework with career preparation. This method of providing academic remediation is characteristic of the two collaborative programs in our sample, the Peninsula Academies in Redwood City, California, and Project COFFEE in central Massachusetts.

At the Peninsula Academies, students attend both regular high school core academy classes and other required and elective classes at the regular high school. Classes for the electronics academy are offered at Sequoia High School; classes for the computer academy are offered at Menlo-Atherton High School. The core academy courses are offered in mathematics, science, the vocational specialization (electronics or computers), and English to students in the program in grades 10 to 12. Most courses have a remedial focus, particularly those in math and science, but students who are more advanced academically can meet their requirements by taking more advanced courses in the regular high school. By and large, academic courses are geared towards preparation for jobs in the computer and electronic fields. The English courses in particular are tailored toward providing students with the written and spoken skills

they need to get a job. They place a heavy emphasis on basic sentence structure, letters and resume writing, and interview skills. In their comments on the program, seniors often indicated that these special skills gave them a competitive advantage over their peers when they apply for jobs.

Counseling and Support Services

Special services to assist students deal with their personal, family and social problems are provided in many of our sample programs. However, programs differ markedly in the way these services are delivered. In some programs, they are offered by the school as supplementary services to the regular educational program. In another, they involve a major infusion of social services into the school by community-based organizations and social service agencies. And in still other programs, they are part of a larger effort to restructure the school environment to make it more responsive to the needs of students at risk.

The supplementary services approach is evident in the form of peer and parent counseling in the Model School Adjustment Program. Sixth-grade students participating in the program are pulled out of class one period a week for a group counseling session that includes other program participants and peer counselors. The counselors are mostly students in the seventh and eighth grades who have been selected for the program based on their interest in the job and their sensitivity in dealing with other students and their problems. They have been trained for their role by a clinical social worker who also serves as a facilitator during the counseling sessions. Though only a small supplementary service to the general school program, the peer counseling sessions are held in high regard by

students in the program. One student said that he really liked being able to talk about his problems with other kids since they could understand him much better than adults. Another said he liked the counseling so much he wanted to be a peer counselor himself when he got through the program.

Family counseling rounds out the supplementary support services offered in the MSAP. Counseling sessions are held eight or nine times during a school semester -- once a week for 60 to 90 minutes -- and serve as a forum for parents to talk about their children's problems and to learn more effective ways of working with them to promote their success in school. Where parents are unable to attend regularly scheduled sessions, the family counselor often sets up special meeting times or arranges home visits to accommodate the family's needs. The importance of family counseling to the program's effectiveness was acknowledged by both program and school staff. It is, in fact, seen as so important that student participation in the program is contingent on parent participation in the counseling sessions.

Counseling and mentors are integral components of several other drop-out programs in our sample. At Middle College High School, each student is assigned to a career education supervisor upon entering the school who serves as both a teacher and counselor to the student for the entire time they are at Middle College. Also during their first year in the school, tenth-grade students take courses in personal and career development. The theme of the first cycle is personal identity; the second, preparation for an internship in a social service agency. A core of the most at-risk tenth-graders is also eligible to participate in a special group guidance program one period a day, five days a week to help them cope with personal, academic, and social problems.

The Peninsula Academies use both teachers and mentors to provide support to high-risk students. Teachers begin working with students upon entry into the program in the tenth grade and develop close personal relationships with their students. During their junior year, students are assigned mentors who are employees in local industries. While the mentor's primary responsibility is to communicate with students about the world of work, many provide students with support in other aspects of their academic and personal lives.

Although supplementary services such as counseling and mentors are among the more common ways that programs provide support services to dropout-prone youth, some programs are moving towards a more comprehensive approach to dropout prevention that makes support services a more integral component of the prevention effort. Such an approach is evident in Far Rockaway High School, one of ten high schools funded under New York City's Dropout Prevention Program. Support services here are provided for core groups of approximately 200 at-risk ninth-graders by the Federated Employment and Guidance Service (FEGS), a community-based organization headquartered in Manhattan.

The FEGS staff based in the school consists of six staff members: a site supervisor responsible for the overall operation of the program; two case managers, who serve as primary counselors to students; an on-site evaluator who works with the case manager and the student to assess the student's needs and refer students to appropriate services; an internship specialist responsible for developing sites for internships and preparing students for the world of work; a community resource specialist who serves as a liaison with other social service agencies and helps students and

their families "negotiate" the system; and a half-time outreach specialist who conducts home visits and other activities to keep parents involved with the student's education. Upon admission into the program, each student is assigned to a case manager who assesses the student's needs and, in conjunction with the student and the school, develops an individualized service plan that matches services with the student's needs. During the time of students' participation in the program, the case manager serves as the main link between the student, the school, and other agencies. As conditions and needs change, the case manager will modify services provided to make them most compatible with the current situation.

Where the case management approach is designed to concentrate support services on a core of the most at-risk youth, an alternative approach, which is designed to serve the larger student body, is used at Roosevelt High School, another school participating in New York City's Dropout Prevention Program. Roosevelt High School, with about 3500 students, is one of the largest high schools in New York, and one with a very high concentration of dropout-prone youth. To create a more supportive environment for incoming students in what is an impersonal, bureaucratic institution, eight small schools or clusters were developed within the large school. Each cluster contains between 175 and 200 students who receive additional support services from a coordinator/teacher, a guidance counselor and two family professionals. Additional counseling and support services are provided by Pius XII, a community-based organization that is based in the school. Students with particularly severe or specialized problems therefore can receive individualized attention beyond that provided through the overall school reorganization.

Career Orientation and Vocational Training

The provision of services aimed at orienting students to career opportunities or developing specific job skills varies significantly across our sample programs. Several programs include a vocational component as one of several program elements, but concentrate more on academic remediation or personal growth and development. In the Valued Youth Partnership, for example, students are taken on field trips to expose them to economic opportunities in the community; minorities who graduated from the district and are successful in various fields also speak at the schools to develop students' awareness of career opportunities and to provide positive role models for students. In a similar vein, the Educational Clinics often bring students to career fairs or hold special classes to train students to fill out job applications or to interview for jobs. In several other programs, however, career preparation is much more central to the program's mission. These programs include Project COFFEE and the Peninsula Academies.

Project COFFEE, a joint partnership between a regional alternative school in central Massachusetts and several high-tech businesses and industries, including Digital Equipment Corporation (DEC), provides instruction and occupational training to 120 students from 18 local school districts. Students are provided courses in five career areas: word processing; computer maintenance and repair; horticulture and agriculture; distributive education; and building maintenance and repair. The courses include both class instruction plus a great deal of hands-on experience in the field. Other services to enhance career awareness and job opportunities include: a weekly pre-employment class that covers job-search

techniques, preparation of job applications and resumes and interview skills; meetings with representatives of business and industry to discuss career opportunities; and unpaid internships arranged by occupational instructors with local businesses. These internships are usually scheduled for one or two days per week at a convenient time for the student and the business.

Technical training, career counseling, and work experience are also integral components of the Peninsula Academies program. Students receive instruction in computers or electronics in special classes that are integrated with the academic coursework. The electronics courses are organized around instruction models or packets that develop skills that are likely to be needed by local industry. The computer courses, in contrast, tend to be self-paced; students work more independently on individual assignments.

Counseling and work experience are provided with the support of private industry. As indicated previously, Academies' students in their junior year are assigned mentors who are employees in local firms. The mentors communicate with students about the world of work and help students orient themselves for careers in the computer and electronics fields. Students who make satisfactory progress during their first two years in the program are guaranteed a summer job after their junior year. These jobs, typically in firms such as Lockheed, Hewlett-Packard, and Xerox, pay students competitive starting wages.

Summary

The programs in our sample provide a variety of academic, support, and vocational services to dropout-prone youth. In the academic area,

these include tutoring, individualized instruction geared to the improvement in basic skills, and an integrated approach to instruction in academic and vocational course work. In the area of counseling and personal support, these services include group and family counseling, referrals to social service agencies, and case managers who work with students to help them deal with the broad range of personal, social, educational, and employment problems. Finally, several programs provide an array of services to enhance students' career opportunities. In addition to course work in vocational areas, these services include participation in career fairs, classes in resume preparation and interview techniques, internships and employment in local companies. Although some programs focus primarily on one or two areas, many programs provide a combination of services to address students' multifaceted needs.

Key Components of Dropout Programs

As discussed in Section II, the literature on dropout prevention and recovery programs suggests a number of program elements or characteristics that appear to be common to "effective" or "successful" programs. During site visits to our sample of programs, we therefore asked program administrators and staff to identify the program elements that they thought were critical to their program's success and to assess whether the program elements identified in the literature were, in fact, important to the effectiveness of their program. Program elements were organized into several areas. At a more general level, they focused on goals and program staff. Respondents were, however, also questioned about the elements of

specific program services that ranged from academic remediation and attendance improvement to vocational training and personal support.

To assess the relative importance of different program elements in contributing to the program's effectiveness, respondents were asked to rank specific elements on a scale from one to five, with a rank of one indicating that an element was not very important to the program's success and a rank of five as very important (or critical) to program success. Respondents were asked to focus only on the elements of their own program, and not to base their responses on their more general ideas about what makes a "good" program. They were therefore directed to respond "not applicable" to some program elements which they might consider to be key to a program's effectiveness where that particular component was not an element of their program. This response was often given for such program elements as job incentives and school-business collaboration. Program administrators and staff often commented that these -- or other -- components would further enhance the quality or effectiveness of their program, but that they were absent from the current program structure. In the discussion that follows, we present the results of this inquiry in each of the major program areas.

Program Organization

Several aspects of program organization and structure are often cited as critical to the success of dropout prevention and recovery efforts. These include small program size, program autonomy, and low pupil-teacher ratios. (See Exhibit 2.) Some research also suggests the importance of an alternative program setting for students who are unable to function in a regular classroom (Hamilton, 1986) and, within a regular

school setting, of block programming (Center for the Study of Social Policy, 1986), a scheduling system which moves a group of at-risk students together for all their classes to create a "family" environment. These organizational features of "effective" programs are seen as contributing to greater student success by providing a more supportive learning environment and by increasing the amount of adult-student contact.

The importance of these program elements for program success is generally confirmed in the responses of administrators and staff in our sample programs. (These responses are summarized in Table 1.) Except for block programming, which was not an organizational feature of most of the programs, all of the organizational features cited above were consistently identified by respondents as important or critical to program success. The most-cited features were low pupil-teacher ratios (91 percent) and program autonomy (87 percent) since, in the views of program staff, these program features allowed them (the staff) to work closely with students and to develop more effective ways of meeting their unique needs. As a teacher in one of our dropout recovery programs stated, "Most of the students in our program have spent years in large classes where their teachers barely knew them. Here they are finally in a place where someone can take an interest in them and give them the support they need to get through school." Less cited as critical to program effectiveness than low pupil-teacher ratios and program autonomy were two other organizational features, i.e., small program size (83 percent) and an alternative program setting (76 percent), although these program elements were still cited by a large majority of respondents as important to program success.

TABLE 1

STAFF ASSESSMENTS OF THE KEY COMPONENTS OF THEIR DROPOUT PROGRAMS

Program Element	Percent of Respondents* Identifying Elements as: "Important" or "Critical" to Program Effectiveness
Organization	
Low-pupil teacher ratios	91%
Program autonomy	87
Small program size	83
Alternative program setting	76
Principal leadership	72
Block programming	46
Program Philosophy or Goals	
Emphasis on real-life problem solving	96%
Well-defined mission	92
Cooperative approach to instruction	87
Survival skills training	78
Develop study skills	75
Staff and Staff/Student Relationships	
One-to-one relationships with teachers	100%
Special praise for good work	100
Clear communication of goals, expectations and responsibilities to students	96
Individualized attention	88
Diversified roles for teachers	87
High teacher expectations of students	83
Teacher responsibility for student success	75
Staff development/teacher training	58
Special compensation for teachers	48

* The percentage is based on the number of responses obtained for each question. The number of responses varied from 22 to 26.

TABLE 1
(Continued)

Program Element	"Important" or "Critical" to Program Effectiveness
Academic Component of Program	
Diagnosis of students' academic needs	91%
Interactive approach to teaching	90
Focus on basic skills	85
Individualized learning program	79
Tutoring	77
Scheduling of academic component	68
Matching student learning styles with methods of instruction	66
Instructional techniques (ability grouping, thinking skills, repetition, study skills, ability grouping)	64
Classroom management techniques	64
Setting of instruction	63
Modified academic curriculum	63
Competency-based curriculum	63
Special activities such as field trips	59
Contract learning	45
Structured learning experiences	42
Attendance Component	
School organization and climate	94%
Discipline	86
Improved recordkeeping	74
Incentives	66
Parent involvement in attendance monitoring	50
Vocational and Career Component of Program	
Involvement of the business community	75%
Integration of academic and vocational coursework	74
Work study	68
Career awareness courses	65
Internships	60
Vocational training	47
Guaranteed employment	47

TABLE 1
(Continued)

Program Element	"Important" or "Critical" to Program Effectiveness
Guidance and Counseling Services	
Individual counseling	100%
Role modeling	90
Mentors, buddies	89
Group counseling	80
Courses in life skills	79
Peer counseling	58
Parental Participation in the Program	40%
Community Involvement in the Program	52%
School-Business Collaboration	61%

Principal leadership was also viewed as a key element of program success by a majority of program staff (72 percent) -- an assessment that is consistent with the literature on effective schools. Several staff members commented that principal leadership is key to motivating staff, mobilizing school resources, and creating the environment for a successful program. There were, however, some differences in staff's perceptions of the role of the principal in different settings. In several programs, including the two comprehensive high schools participating in the Dropout Prevention Program in New York City and the Model School Adjustment Program in Broward County, Florida, program staff were unanimous in their views that the programs could not have even gotten off the ground without the commitment and dedication of the principal. Yet in other programs, including the dropout recovery programs, the role of the principal was seen as less critical to program success. Here staff tended to view autonomy as most important. As long as the principal gave staff the resources they needed and let staff "do their own thing" with students, the program could operate successfully.

Staff Characteristics and Interactions with Students

In addition to organizational characteristics such as program autonomy and low pupil-teacher ratios, program staff consistently identified several characteristics of staff and staff/student relationships as key to program success. Most important was the ability of teachers to develop one-to-one relationships with students (100 percent) and to provide them with individualized attention (88 percent). Program staff stated time and again that many students they worked with rarely had an adult who took an active interest in their academic progress and personal development. For

them, the program was the first opportunity to develop a relationship with an adult who cared about them personally and who would work closely with them to help them succeed. Without this individualized attention, many students would again "fall through the cracks."

The one-to-one relationship with students was, however, only one aspect of the teacher-student dynamic that was seen as key to program success. Also critical to program effectiveness were high teacher expectations of students (83 percent), clear communication of the program's goals and of students' responsibilities (96 percent) and special praise for good work (100 percent). Respondents also expressed the view that a "cooperative" approach to instruction, rather than a competitive approach worked best with dropout-prone youth (87 percent), since it provided a more supportive structure for student learning.

While program staff were quite consistent in their views that teacher-student interactions and relationships were critical to their program's effectiveness, they were less affirmative about the importance of staff development and teacher training for program success (58 percent). To some extent this could be attributed to the fact that most of the programs did not provide any special training for program staff. However, even where staff development was provided, it was not generally seen as critical to the program. As the program coordinator in the Model School Adjustment Program in Driftwood Middle School commented, "What this type of program needs is people who really enjoy working with kids who have a lot of problems in school. If all you want in a teaching position is a well-motivated class with few behavioral problems, you'll never make it in this type of program, no matter how much special training you get."

Even less important to program success than staff development is special compensation for teachers (48 percent). In most of the sample programs we visited, teachers received little or no additional compensation for teaching in the program and, in some privately-run programs such as the Educational Clinics in Washington State, salaries are even lower than in similar positions in the public schools. However, several teachers indicated that for them salaries were not the primary motivating factor. They were much more concerned with working with kids in a non-bureaucratic setting where they had greater autonomy. Also, the opportunity to assume diversified roles -- teacher, counselor, mentor -- made the job more challenging -- and in the opinion of many respondents, contributed significantly to the program's effectiveness.

Program Services

In their assessment of key program elements, program staff were asked to consider the importance of the different services that were being provided by their program. Our analysis of staff responses highlights two key points: one is the critical importance of pupil support services in the success of dropout prevention and recovery programs; and two is the differential importance of different types of service delivery mechanisms in each of the following service areas.

Pupil Support Services

Program staff consistently identified counseling as a key element of program effectiveness -- although in different programs, counseling took a variety of forms. When asked to differentiate the importance of different types of counseling services, individual counseling (100 percent) was consistently identified by program staff as the best way to work with students in the program. It should be noted, however, that individual

counseling, like counseling more generally, often takes different forms. In some programs, it is more formal: students meet with teachers, counselors or mentors at prescribed times each week to discuss personal, family or school problems. More often though, it is more informal: as problems arise, teachers or counselors take time to "hear students out" and help them deal with an immediate concern. Other times they may direct them to people in the school or in social service agencies who can provide them with more professional assistance with their problems.

Although individual counseling in its different forms is a common element of most dropout programs, other forms of counseling are often cited as key to program success, among them, mentors (89 percent), role models (90 percent), and group counseling (80 percent), and, to a lesser extent, peer counseling (58 percent). Most programs, however, use only one or two of these methods of providing student counseling. Mentors, for example, are an important component of the Peninsula Academies in Menlo Park, California: individual mentors from private industry confer regularly with program participants to help them deal with personal and job-related issues. The Valued Youth Partnership in San Antonio, in contrast, relies heavily on role models to enhance personal growth. Successful people from the community are brought to school to apprise students of job opportunities and motivate them to complete their education.

Academic Remediation

Most students in our sample of dropout prevention programs have a history of school failure. Academic remediation is therefore a common focus of the dropout prevention programs we visited. However, as

indicated previously, academic remediation takes place in a variety of settings and uses different types of curricula and instructional techniques, including contract learning and peer tutoring. Program staff were therefore asked to assess the relative importance of many of these techniques to the success of their own program. Several points emerge from this assessment.

First is the importance to program success of diagnosing individual students' academic needs and developing an individualized learning program that is tailored specifically to meet those needs. These components were identified as important or critical to program success by 91 percent and 79 percent of program staff respectively. As a teacher in one of the large high schools in our program sample commented, "These kids come to school with a range of skills and competencies. Some can handle pre-algebra while others barely know the basic arithmetic functions. It doesn't make sense to try to teach every kid the same thing. You have to start where they are and then try to bring them up to a graduation standard."

A second aspect of the academic programs considered key to success is the concentration on basic skills (85 percent). Although teachers in several programs commented that they would like to provide a more enriched curriculum that develops skills in critical thinking and analysis, they also observed that students seem to motivate themselves better to continue the program when they can master skills and pass competency tests. The dropout recovery programs are particularly oriented towards the acquisition of basic skills, especially for older students who have too few credits for a regular diploma and who need to work towards a GED.

Still another element of the academic program that is highly regarded by program staff is an interactive approach to teaching (90 percent). While some students are able to acquire knowledge and skills through independent study and seat work, teachers and other program staff felt that students were more successful when teachers engaged them in the learning process. The potential for this engagement was seen to be greatest in small classes where teachers would conduct lessons almost through casual conversation and where students could ask questions whenever they were having difficulty. The potential for this type of interaction is also great in tutoring programs (77 percent), where tutors could engage tutees in similar types of dialogues.

Although program staff were generally in agreement about the importance of diagnosis of students' needs, a focus on basic skills, and an interactive approach to teaching as key to program success, there was less agreement about the importance of other components of the academic program. Matching student learning styles with methods of instruction was considered important only by about two-thirds (66 percent) of respondents, and respondents were even more divided about the importance of other academic intervention: alternative program settings (63 percent), scheduling of classes outside of normal school hours (68 percent), the use of field trips and other special activities as tools of instruction (59 percent), and contract learning (45 percent). Many respondents considered these components to be important -- simply less important than the components described above.

Vocational and Career Preparation

Only a small group of programs in our sample included a major vocational component. It is therefore difficult to assess adequately the relative importance of different aspects of vocational training to program success. The problem is compounded further by the fact that not all of the elements that are identified as important in the literature are components of our sample programs. However, despite these limitations, the involvement of the business community in vocational and career programs clearly emerges as a component that is viewed as important to program effectiveness by a large majority of respondents (75 percent). Several factors appeared to provide the basis for this assessment.

One reason cited by program staff is the fact that business involvement provided the program with a legitimacy in the community it would not have otherwise. As a teacher in one program commented, "It is very hard to get community support for problem kids who cause trouble in school. With the business community behind you, a lot of the opposition just melts away." This in turn works to stimulate faculty enthusiasm for and commitment to the program. As another teacher observed, "When you see some of the big private companies contributing staff or equipment to the program, it's hard not to put all your efforts into making the program work."

Business involvement also is viewed as having a positive effect on student attitudes and work habits. By making it clear that success in school can lead to a real job after graduation, business involvement can improve student motivation to work harder for his or her diploma. As a teacher in one of the collaborative programs observed, "It is through the

school-business collaborative that students are able to develop a network of contacts that line them up for jobs in their field. When they get out of school, they are in a much better position to find a decent job."

Other vocational components besides business involvement were identified by program staff as important to the success of dropout prevention efforts. These included work study (68 percent), career awareness courses (65 percent), internships (60 percent) and guaranteed employment (47 percent). In their comments about the way to structure the vocational component of a dropout program, a number of respondents expressed the view that guarantees of jobs upon program completion would serve as a great motivator to students to finish school. They could not, however, attribute the success of their current program to this element, given its absence from the program.

Summary

In assessing the elements of dropout prevention and recovery programs that are key to their program's success, teachers and staff identified several program elements that are highly congruent with those found in the dropout prevention literature. These include:

- Small program size, low pupil-teacher ratios, and program autonomy;
- Individualized attention to students and one-to-one relationships between teachers and students;
- Clear communication of program goals and student responsibilities and praise for good work;
- Counseling, in the form of individual counseling, mentoring and group counseling;
- Individualized learning programs focused on basic skills that are based on a diagnosis of students' academic needs;

- Matching methods of instruction with student learning styles; and
- School-business collaboration in career awareness and job training programs.

Although other program elements are also identified as important to program success, their association with program effectiveness is not as strong as the program elements discussed above.

Strengths and Weaknesses in Program Delivery

One of the central concerns of the site visits to sample programs involved program operations. Given the experience of administrators and staff in organizing and providing services in dropout prevention and recovery programs, we sought to ascertain their views about the ways other practitioners could successfully structure similar programs. Specifically, we attempted to determine the areas of operation where programs were most successful and the actions that were carried out that contributed to the success. We also attempted to ascertain areas of program weakness so that other practitioners could draw on this experience and avoid some of the pitfalls endemic to these types of programs.

To obtain information about program operations, we asked program staff to respond to a brief questionnaire that focused on the following areas: staffing; scheduling and program setting; program services; relationships with other organizations in the community; and success in meeting program goals. Respondents were asked to rank their success in each of these areas on a scale from one to five. A rank of one meant that the program was "very unsuccessful;" ranks of four and five meant that it was "successful" or "very successful." Follow-up questions were then

asked to get respondents to explain what they did that contributed to success or failure and what they might do differently to improve the quality of different aspects of the program.

Not surprisingly, program administrators and teaching staff considered their programs to be successful in most areas of operation. (See Table 2.) They were nonetheless able to differentiate areas where the programs were particularly strong and others where the programs could use some improvement. According to program staff, the programs were most successful at diagnosing students' needs (77 percent) and developing a program of instructional, vocational, and support services that matched these needs most effectively (100 percent). Respondents attributed this success to several factors.

First, in many programs, staff spent a great deal of time during the screening process reviewing records and interviewing prospective participants to learn about students' needs and characteristics. In the Model School Adjustment Program, for example, the program director spends the entire first month of school reviewing student records, and conferring with elementary school teachers to determine which students would be best served by the program. Similarly, Operation Success in Far Rockaway High School develops their pool of potential participants by working closely with the feeder junior high school that is also providing special support services as part of New York City's Dropout Prevention Program. The program staff have the added benefit that the same community-based organization is providing support services in both the junior high and the high school -- a factor which facilitates communication about students.

TABLE 2

STAFF ASSESSMENTS OF THE STRENGTHS AND WEAKNESSES IN PROGRAM DELIVERY

Program Component	Percent of Respondents Ranking Component as: "Successful" or "Very Successful"
Program Staffing	
Developing teacher commitment to program goals	86%
Developing appropriate teacher interactions with students	77
Attracting and retaining teachers and program staff	73
Providing staff training and development	73
Developing the Instructional Program	
Determining the instructional, counseling and vocational components of students' programs	100%
Matching curriculum and services to student needs	86
Diagnosing students' needs	77
Organizing and scheduling program services	77
Providing the appropriate setting for student instructions	55
Providing Services	
Providing adequate or appropriate counseling for students	91%
Coordinating services for students with non-school agencies	71
Obtaining internships or job placements for students	62
Linkages Outside the School	
Obtaining and maintaining the support of the local community for the program	55%
Obtaining the support of the business community	53
Ensuring that the business community carries out its responsibilities and commitments to the program	44
Obtaining and maintaining parental involvement in their child's educational program	23
Meeting Program Objectives	
Maintaining student interest in staying in school	91%
Achieving students' academic goals	91
Preventing students from dropping out of school	90
Meeting the job skills objectives of the program	84
Meeting the behavioral objectives of the program	82
Improving student attendance	77
Placing students in gainful employment	56

* The percentage is based on the number of responses obtained for each question. The number of responses varied from 15 to 22.

In addition to this screening prior to admission to the program, many of our sample programs administer diagnostic tests when students enter the program to better understand students' academic needs and to develop individualized education programs for them. The testing approach is used extensively in the dropout recovery efforts of the Educational Clinics and in the public schools that are funded under Colorado's Second Chance Program to prepare students for a regular high school diploma.

A second factor -- and the one cited most frequently by program staff as contributing to their success in matching students to services -- was their ability to develop close, personalized relationships with students through both formal counseling sessions and more informal interactions. Virtually all of the programs we visited designated one or two individuals who were responsible for watching out for a group of students. The title conferred on staff varied from program to program -- ombudsman in the Satellite Academies, mentor in the Peninsula Academies, and Middle College High School, case manager in Operation Success at Far Rockaway High School. But their role was fairly similar: work with students, gain their confidence, show them that someone really cares about them, and arrange for them to get the help they need academically, personally, and vocationally.

Although staff in similar programs considered their greatest success to be matching students with appropriate services, they also saw themselves as successful in attracting teachers to the program (73 percent), developing teacher commitment to program goals (86 percent), and developing appropriate student-teacher interactions (77 percent). Several program directors observed that they rarely had any problems finding the

right people for the job. Occasionally, people would take a job in the program and would leave because of job-related stress, but that situation was rare. Teachers expressed their own reasons for the program's success in generating staff commitment. One said, "This is one of the few places where you really get the chance to teach and see the results of your efforts. Some of these kids have been out of school for months at a time. Now they're here working almost every day. They're seeing progress and you see it as well." Another teacher in one of the Educational Clinics said, "I just got tired of big classes in a regular high school with bells and rules and red tape. Here you come in and just work with the kids."

The presence of special programs in a school also works in some cases to improve staff morale and the overall environment in a school. As one staff member at Roosevelt High School in New York City observed, "Before we had this program, the school was practically dead. There was no school spirit. No one came to dances or participated in extracurricular activities. But in the last two years, there has been a big change. Students are participating more, teachers are more involved, and people are really trying to make things happen. The program has really given people a shot in the arm to work for the kids and the school."

On the negative side, staff saw their programs as less successful in a number of areas, most significantly in obtaining and maintaining parents' involvement in their child's educational program (23 percent). As a teacher in one of New York City's high schools commented, "The schools have been trying for years to get parents in and get them involved in school. You hold open school nights, you schedule individual

conferences, but for the most part, people don't show up. You have a very transient population here where adults have a lot of other things to worry about besides their kids." One teacher in an Educational Clinic said that they had pretty much "given up" on parental involvement and that it was better to try to just work with the kids to develop more responsible attitudes and behavior. "In many cases," she said, "parents were really terrible role models for the kids -- drug problems, alcohol abuse, physical violence. It's better to try to remove them from that environment and try to give them a fresh start."

While parent involvement was clearly a problem in many sample programs, there were still some positive assessments of program effectiveness in this area. The Model School Adjustment Program in Driftwood Middle School, for example, requires the participation of parents in family counseling sessions for students to be accepted into the program -- a requirement that appears to have worked quite successfully. "Oh sure, we've had lots of parents who won't agree to come for family counseling," said the MSAP's program director. "But after their kids have started to flunk all their courses during first semester, many of them come around and agree to participate in the counseling sessions the next term." Moreover, many parents who at first expressed reluctance about participating felt that they really learned a lot about how to relate to their kids and how to help them in school.

Besides parent participation, staff identified one other area where less than half of the respondents viewed their programs as successful: ensuring that the business community carries out its responsibilities and commitments to the program (44 percent). This problem area was cited

frequently by staff in some of the dropout recovery programs. As a teacher in one of the Educational Clinics observed, "We have the 'worst' kids in this program and everybody knows it. They're the ones who cause all the trouble -- they have trouble with the law, the girls get pregnant -- and nobody wants to have anything to do with them. it's hard to get business people to support the program because they just don't think it will do any good." Some program staff, however, feel that they have been very successful in their efforts to get business and community support for their programs through hard work, preseverance and the dedication of committed individuals. The school-business collaborations found in the Peninsula Academies and Project COFFEE represents the best example of business support of dropout prevetion efforts and some potential ways that this support can be developed.

Summary Observations About Dropout Programs

Our site visits to dropout programs produced a set of summary observations that have direct implications for the development of dropout prevention and recovery efforts in other places. Some of these observations concern program organization and structure; others focus more on intangibles -- program leadership, styles of interaction among staff members and between staff and students. Though difficult to measure precisely -- and often to replicate in other settings -- we believe that some of the practices we observed could contribute greatly to program success. These summary observations are described below.

Principal Leadership

Principal leadership has been identified consistently in the

literature as a key component of effective schools. But there is an element of leadership that we observed to be essential to the success of dropout prevention programs, namely, the principal as entrepreneur. In schools where programs appeared to be working especially well, the principal brought to the dropout problem the view that the school had to be willing to experiment with new approaches. Instead of feeling threatened by the introduction of new programs or outside staff into the school, these individuals welcomed the addition of resources in the school and vigorously sought out funding for these resources from government agencies, foundations, or local businesses. These individuals also sought out relationships with other community agencies to provide services to students in a setting outside the school. The need to rely on other agencies was not seen as a sign of school failure, but simply as another way to help the school provide the resources it needed to meet its responsibility to students.

Comments by school staff reinforce the importance of the principal's role as entrepreneur, especially for programs run in regular schools. One teacher in a high school in New York City stated: "The principal has worked very hard to get dropout prevention funds and other programs into the school and this has had a tremendous effect on staff morale. Before we had nothing special to offer teachers to motivate them to work harder for these kids. Now there's something for them to grab onto." A staff member in a middle school expressed similar views. "In our school, the principal works with you. If you come up with an idea that you think will work, the principal will go along with you and support you. If you need special funding, the principal will do whatever he can to try to get it.

When someone like that is so open to new ideas and willing to try to get you what you need to make an idea work, you really go the extra mile in trying to help the children."

Staff Involvement

The success of any program ultimately depends on the people who carry it out. People need to "buy in" to the program and develop a sense of ownership if they are going to make the program work. Efforts to involve staff in program development and implementation are therefore a central feature of the Dropout Prevention Program in New York City. A school-based planning team in each school made up of volunteer teachers, paraprofessionals, aides, administrators, and a Dropout Prevention Coordinator work with the principal and administration to plan, implement, budget, and evaluate prevention strategies for their schools. All teams also participate in a summer planning institute to create projects that are tailor-made for their schools.

The enthusiasm and commitment generated by this team management approach to the dropout prevention effort was striking in both high schools we visited as part of our field work. Several teachers indicated that the team management approach made them feel like they were really participating in decisions about their programs and having an impact on how things got done. Some said that they were putting in a lot more of their own time -- without extra pay -- because of their commitment to the program. Some observed a filtering down effect: many teachers who were not part of the management team were inspired by the team management approach to get more involved and put in extra effort to get the school moving again.

Staff involvement in program development was structured in less formal ways in other programs in our sample. In the Model School Adjustment Program, for example, the program director spent a great deal of time before the program was implemented to explain the program to teachers and to solicit their views about the best ways to schedule and structure program activities. As teachers expressed concerns about students being pulled out of class too often and missing regular class work, the program was scheduled so that students would only be pulled out of each class one period per week. Also, academic remediation was structured to include material being covered in regular class so that students would not miss out on instruction. Classroom teachers thus expressed the view that the program supported their efforts to work with students rather than working at cross purposes with them.

Integration

Although all of the programs in our sample did not provide every type of service to all students, many of the programs recognized that lack of academic progress was only one component of student needs and that multiple interventions were required to meet these needs. Students' personal and social problems were particular foci of attention in nearly all programs and a variety of strategies were implemented to help students address them. However, central to nearly all strategies was the commitment of time of one individual who would take a special interest in students and help them work through their particular problems. When asked what they liked best about their special programs, students consistently pointed to their close relationship with their teacher or mentor. Adults are not the only people who can fill this role, however. In one program,

where peer counselors were assigned to work with students, i.e., the Model School Adjustment Program, students said they really liked being paired up with other kids their own age who could relate to them better than adults. But for such a strategy to work, students need to be well prepared for their role as counselor.

Multiple Services

Consistent with their recognition that individual students have multiple needs, the dropout programs in our sample, and particularly those in the large, comprehensive high schools, also recognized that different students need different combinations of services to help them stay in school and complete their education. In Far Rockaway High School, in New York, for example, they use the case management approach to match students with required services. The case manager from Operation Success assigned to each student works out the student's service plan and arranges for that student to receive appropriate services. Some are provided by the Federated Employment and Guidance Service (FEGS), the community-based organization working in the school, either at the school site or at their main facility; others are provided at other agencies where these cannot be provided by FEGS.

The case management approach is also used in Roosevelt High School in New York, although in that school it represents a small portion of the overall dropout prevention effort. In addition to case management, Roosevelt provides a PM school in late afternoon to accommodate students who cannot attend during regular hours, an on-site, child-care center where teen parents can leave their children while they attend class, and a variety of other support services for students. Some of these are funded

as part of New York's Dropout Prevention Program, while others are being supported by local foundations and private businesses in the area.

Feedback and Reinforcement

A central concept of a number of the dropout programs we visited was that students needed constant rewards for progress in their academic work and in their personal behavior to overcome their poor self-image. One approach to providing this reinforcement is through regular appraisal of their work. In Project COFFEE, students receive a mark every day for the work they complete. Similarly, in the Model School Adjustment Program, both peer tutors and classroom teachers fill out a report form every day in which students are rated on their work and behavior. If students receive a certain number of points during a week, they are eligible for free passes to the movies or fast-food restaurants. At the end of the semester, students scoring the most points for work and behavior are eligible for trips to local amusement parks or other attractions.

Even among high school dropouts attending recovery programs, regular appraisal of progress is used as a way to motivate students to keep going. A Denver high school participating in Colorado's Second Chance Pilot Project, keeps a record of each student's academic progress. Each time a student passes a skills test or moves on to a higher level of work, that event is entered into the student's record. When the student has passed all of the required skills, he or she can fulfill their credits for high school graduation. Student reactions to the use of daily progress reports confirm its importance as a technique in dropout prevention and recovery. One sixth-grader in the MSAP commented that, "You really keep trying hard because you want to get a lot of points and get something

special." Older students in the Second Chance Program echoed these sentiments. One student commented, "In the regular high school it took so long to get the credits for a course. Here you can get credits a lot faster. And you can see every day how much you've gotten and how much you still need to go. I really like the feeling of progress you get."

School-to-School Linkages

During the course of the site visits, a theme that constantly emerged was that students fall through the cracks in the transitions from elementary to middle school or junior high school and then again at the next transition to high school. The first transition is difficult because students are moving from a smaller school with self-contained classes to a much larger school with departmentalized programming; the second, because students who continue to do poorly in school may not feel prepared, and thus may not even show up for high school. Program staff, therefore, felt it was critical to bridge the gap between school levels to ease the transition for students.

The dropout programs in our sample have developed a number of techniques for this purpose. In the Valued Youth Partnership, for example, elementary and junior high/high schools are linked primarily through the youth tutoring component of the program. Older students who are participating in the program come into the elementary schools to provide instruction to younger students and to serve as role models for them. In the Model School Adjustment Program, the linkage is developed through field visits by the program director to feeder elementary schools in the spring preceding student's entry into the middle school. During this time, students are provided information about the school and the program and

teachers are conferred with to identify students who could benefit most from program services. These visits facilitate screening of students for the program when they enter the middle school the following fall.

The transition from junior high to high school is facilitated through similar techniques in some schools. Roosevelt High School terms the process "articulation." The articulation coordinator from the high school makes visits to feeder junior high schools to explain the high school program and the special services the school offers to students and to answer student's questions about the school. Students are also brought into the high school to familiarize them with the building and the staff and to help overcome their fears about coming to the school. At Far Rockaway, the transition is facilitated further through the community-based organization that provides support services in the high school. In a unique arrangement, the Federated Employment and Guidance Service operates programs in both the feeder junior high school and Far Rockaway High. Staff at the junior high therefore know many of the students who would be eligible for the high school program well before they arrive at school and can work with students and high school staff to ease their way into high school. Staff in the high school can build on these activities and quickly get students into their appropriate program of services.

Parent Involvement

Although parent involvement is generally regarded as important to the success of dropout prevention efforts, the programs in our sample suggest two key points about parent involvement. One is that it may need to be approached differently at different stages of children's development. The second is that schools may have different types of leverage over parents at different points in time.

In programs for younger students aimed at dropout prevention, parent involvement is not only encouraged, but is often a key component of the overall program. In the Model School Adjustment Program, for example, it is the "third leg" of support for the child, the other two being academic remediation and student counseling. As stated previously, parents are required to participate in family counseling sessions if their child is to receive other program services. Other programs do not require parental participation, but use varied outreach techniques to get parents involved in their children's education or personal development. By the time students are older, however, most schools in our sample have recognized that they have less leverage over parents and have tended to concentrate their energies more on the child than on the parent. In fact, in some of the dropout recovery efforts we observed, parent involvement is seen as counterproductive because parents are unable to serve as positive role models for their children. In summary, our observations suggest not that parental involvement is undesirable, but only that it may need to be approached differently for students of different age and circumstance.

School-Business Linkages

School-business collaboration is generally regarded as a key component of many successful dropout prevention programs. The linkage with private businesses is seen as providing resources for programs that ordinarily would not be available from regular school budgets, e.g., equipment, personnel, internships for students, and broadening the base of support for the program in the larger community. However, as several students of dropout prevention programs point out, successful partnerships or relationships do not just "happen." They require that participants in

the process recognize each other's agendas and work diligently to reconcile potentially divergent interests. Participants in this relationship must also recognize that collaboration is not an end in itself, but rather the means to an end. Rather than getting absorbed in the process of working out the relationship, school and business leaders must use their talents and energies to mobilize resources for the benefit of the students the program is designed to serve.

A number of programs we visited provide excellent examples of the ways school-business collaboration can be used to great advantage. The students in the Peninsula Academies appear to have benefitted tremendously from their schools' collaboration with some of the country's best-known, high-tech firms in Silicon Valley. The same appears to hold true for students in Project COFFEE, which has close links with Digital Equipment Corporation and other private firms in central Massachusetts. However, our conversations with program staff in both of these programs confirm the findings of observers of other programs. These partnerships did not come into being overnight. They developed over time with the hard work and perseverance of a number of dedicated individuals. One staff member at the Peninsula Academies said the structure of the program and the relationship with the private sector went through some "growing pains" and that it was only in the last few years that the program had reached a point of equilibrium. Drawing on this experience, we would anticipate that other collaborations would face similar situations and that participants in these collaborations would need to be prepared to handle the unexpected as they organize and develop new projects that link schools with the business community.

IV. CONCLUSIONS AND RECOMMENDATIONS

The literature on dropout prevention and the site visits to a sample of promising dropout prevention and recovery programs provide some insights into ways that programs are currently structured and some strategies for structuring future programs.

General Observations

One observation is that dropout prevention programs that are not designed specifically as programs for female students, e.g., pregnant and parenting programs, do not appear to treat female students differently than males. Interviews with staff at the programs included in this study did not elicit any special procedures for identifying girls who are at risk of dropping out nor any special interventions focused on the needs of female students. However, the programs did not appear to focus on the special needs of boys either. Essentially, the programs treated girls in much the same way as boys and, in general, appeared to serve them both equally well. It was not possible to assess from this study whether the practices observed represent the best approach to addressing the unique problems of female students. However, Earle, Roach and Fraser (1987) suggest special components targeted specifically at female students, e.g., collaborative group projects, remedial instruction in abstract spatial reasoning, and special encouragement for females to take courses in math and science, that should be included in dropout prevention programs.

A second observation is that "effective" or "successful" dropout prevention programs appear to have many of the characteristics of

effective schools more generally -- in particular, principal leadership. What may be unique to dropout prevention efforts, however, is the principal as "entrepreneur." In the dropout prevention programs included in this study that appear to be working successfully, the principal was an individual who was willing to take risks, to try out new ideas, and to seek out resources in the larger community to meet the needs of his or her students. The principal also exercised a collegial style of leadership, working closely with teachers and program staff to plan program services and implement the program. This leadership style worked to create a greater esprit de corps in the school and generated more of a commitment to the program itself.

Recommended Practices

The literature review and the site visits also identified some unique aspects of the dropout problem that can be addressed by including particular components or features in dropout prevention programs. Based on this research, it is therefore recommended that program designers structure dropout prevention efforts using the following guidelines.

EARLY INTERVENTION

Direct dropout prevention efforts at younger student who evidence the characteristics of potential dropouts.

For many dropouts, prevention efforts in high school come too late in their education careers to help them stay in school. Program staff in programs included in the study consistently stated that dropout prevention efforts needed to begin at a much earlier stage than high school. The upper elementary grades were seen by some program staff as an appropriate age to begin dropout prevention efforts, while others saw the need for this type of intervention even earlier in students' school careers.

Two of the programs reviewed here specifically take this approach to dropout prevention. The Model School Adjustment Program in the Driftwood Middle School in Broward County, Florida provides sixth-graders who have a record of academic and behavioral problems in elementary school with peer tutoring to help them improve their basic skills and peer and family counseling to help them work through their personal and family problems. The Valued Youth Partnership in San Antonio, Texas, pays junior high school and high school students minimum wage pay for work as tutors to elementary school children as a means to enhance the tutors' self-esteem and improve the academic skills of both tutors and the younger children.

SCHOOL-TO-SCHOOL LINKAGES

Establish linkages between the different levels of schooling (elementary-middle-secondary) to facilitate students' transitions from school to school.

Dropout-prone youth often have serious problems making the transition from elementary school to middle school and then making the next transition to high school. The first transition is difficult because students are moving from a smaller school with self-contained classes to much larger schools with departmentalized programming; the second, because students who continue to do poorly in school may not feel prepared and thus may not even begin to attend high school.

The programs in this study use a variety of techniques to link school levels and to facilitate students' transitions to the next school. In Theodore Roosevelt High School in the Bronx, New York, an "articulation" coordinator from the high school makes visits to feeder junior high schools to explain the high school program and answer students' questions about the school. In Far Rockaway High School in Queens, New York, a community-based organization provides support services to students in the feeder junior high school as well as the high school, thus helping dropout-prone students ease their way into the high school even before they arrive.

SMALL PROGRAMS AND CLASSES

Keep dropout prevention programs small in size and organize student instruction in small classes.

Many students who drop out of school have been alienated by large bureaucratic institutions where

they cannot be distinguished from hundreds of other students. To address this problem, several of the dropout prevention programs have established policies to keep the programs smaller and to create a more supportive environment for students. Satellite Academy, for example, when faced with greater demand for places in the school, opted to open branch campuses, rather than expand a single campus. LaGuardia Middle College High School has similarly opted to keep student enrollment at a maximum of 500 students to ensure personalized attention.

Programs to assist out-of-school youth return to school and complete their high school education are also small in size by design. Educational Clinics, Inc., one of the larger dropout recovery programs funded in Washington State, keeps student enrollment at a maximum of 100 to 125 students to promote a more personalized learning environment.

Many students also drop out of school because they have been unable to function successfully in large classes where they did not receive individualized instruction and personal attention. Small class size works to overcome some of the students' disaffection with school by allowing teachers to use a more interactive style, to individualize their program of instruction, and to experiment with different approaches to working with students.

Small class size is a characteristic of a number of the programs included in this study, but it is especially prevalent in the dropout recovery programs. Most classes in the Educational Clinics in Washington State contain between five and ten students. Similarly, the Second Chance Centers visited in Colorado organize classes with fewer than 20 students to allow teachers to individualize student programs and to match their instructional approaches with student learning styles.

BASIC SKILLS

Focus dropout prevention programs on basic skills as an initial step in improving academic performance.

Most dropout-prone youth are deficient in basic skills and, as a result, have been retained in grade at least once or twice over their school careers. To redress this problem, almost all of the programs in this study concentrate academic coursework on basic

skills in core subject areas. Program staff stress that while they would like to provide a more enriched curriculum that develops skills in critical thinking and analysis, students seem to be able to motivate themselves better to remain in school when they can master basic skills and pass competency tests. The dropout recovery programs are particularly oriented towards the acquisition of basic skills, especially for older students who have too few credits for a regular diploma and who need to work towards a GED.

Instruction in basic skills is also an important adjunct to job training efforts aimed at dropout prevention or recovery. The literature in this area finds that job training alone is not sufficient to help dropout-prone youth and school dropouts complete school. However, job training, in combination with basic skills, enhances students' chances of finishing school and obtaining jobs requiring higher-level skills.

The Peninsula Academies in California best illustrate the strategy of integrating instruction in basic skills with technical training oriented towards careers in the computer and electronics fields. Students receive instruction in core academic courses that are tailored to providing students with the skills needed to get and keep a job in these fields. This instruction is supplemented with vocational training and internships with local high-tech firms that are potential employers of program graduates.

CONCERNED ADULTS

Provide students with adults (teachers, counselors, volunteers) who can establish a personal relationship with them student and who can provide them with the support they need to deal with personal as well as academic problems.

Many students who drop out of school frequently do not have the parental support they need to help them with their personal and academic needs. Many also feel alienated by schools where they tend to get lost in a large, impersonal institution. Program staff stated time and again in this study that many students they worked with rarely had an adult who took an active interest in their academic progress and personal development. The program was the first opportunity for them to develop a relationship with an adult who cared and who could work closely with them to help them succeed in school.

The programs in this study designate different individuals to establish a one-to-one, "caring" relationship with students. At the Peninsula Academies in California, these adults are mentors from private industry; at Far Rockaway High School, they are case managers from a community-based organization providing support services to students in the school; in other programs, they are the students' teachers or counselors. In all programs, however, students are given the opportunity to work with an adult who takes an active interest in their personal development.

REINFORCEMENT AND FEEDBACK

Provide students with regular feedback about their progress to help stimulate improvements in school work and behavior.

Many students who drop out of school have developed a poor self-image because of their failure to make adequate progress in their school work. To address this problem, many of the dropout programs visited attempt to provide regular reinforcement of students' academic progress and rewards for significant improvements in their work or behavior.

Feedback is provided in several ways. In Project COFFEE, in North Oxford, Massachusetts, students receive a mark every day for the work they complete. Similarly, in the Model School Adjustment Program, peer tutors and classroom teachers fill out a report form every day in which students are rated on their work and behavior. When students receive a certain number of points, they are eligible for free passes to the movies or fast-food restaurants. Even some dropout recovery programs use regular appraisal of students' progress as a way to keep students going. A Denver high school participating in Colorado's Second Chance Program keeps a record of each student's academic progress and moves students to a higher level of work each time the student passes a skills test.

CAREER ORIENTATION

Link job training to long-term employment prospects in dropout prevention programs with a vocational component.

Many students with a history of school failure drop out of school because they are unable to see the linkage between education and future employment.

Preparation for the world of work is therefore a central component of two dropout prevention programs visited in this study. The Peninsula Academies provide an integrated program of academic coursework and vocational training in computers and electronics that prepares students for careers with high-tech firms in the San Francisco Bay area. Through a collaboration with private firms such as Hewlett-Packard and Xerox, the program provides students with technical training, career counseling, internships, and work experience in the high-tech field. Project COFFEE also uses a collaborative arrangement with the Digital Equipment Corporation and other local companies to provide students with training and hands-on work experience in a number of career areas, including word processing, computer maintenance and repair, horticulture and agriculture, and building maintenance and repair.

In summary, the literature and the site visits identify a number of promising strategies and practices that could be used effectively to help dropout-prone youth remain in school and dropouts return to school to complete their education. School officials, must, however, be flexible in incorporating these components into their own dropout prevention initiatives. They must recognize that different students may need different types of services to help them remain in school and that different program features may need to be adapted to their school's particular circumstances.

Recommendations for Federal Policy

The programs included for site visits in this study were selected, at least in part, because they provided empirical evidence to indicate that they were successful in addressing some aspect of the dropout problem. However, a review of information from nearly 500 dropout prevention programs found that very few programs maintain data on program

effects. Moreover, even where schools do evaluate the effects of their programs, the evaluation results are generally based on weak evaluation designs. As a result, there is relatively little hard evidence about "what works" in dropout prevention. It can therefore be concluded that while the literature and the site visits suggest some promising practices for dropout prevention, most of the practices suggested above need further empirical validation before it can be established with certainty that they "work" and should be used more widely. It is therefore recommended that the Federal Government pursue the following policy to support the development of "effective" dropout interventions.

DEMONSTRATION PROGRAMS	The Federal Government should provide funding for demonstration programs to test the viability of alternative intervention models in preventing school dropouts.
PROGRAM EVALUATION	The demonstration program should incorporate a rigorous evaluation component that would assess the relative effectiveness of different types of interventions.
PLANNED VARIATION	The demonstration should included planned variation to determine the types of strategies that are most appropriate for different settings and different populations.

These steps will ensure the identification of interventions that have the greatest potential for success.

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APPENDIX A

STAFF PROTOCOL: PROGRAM BACKGROUND

PROGRAM DEVELOPMENT

- How did the program get started?
- What led to the establishment of the program?
- Was the program established as a result of: teacher initiative; principal direction; district policy; state requirements; combination of above; outside agency; other?
- Who was involved in the planning and development of the program: teachers; school administrators; district administrators; members of community-based organizations; the business community; other?
- What type of procedures were used in planning and developing the program?
- How long did the planning process last? How long did it take to move from planning to program implementation?
- Where the program required the involvement of non-school organizations, e.g., local businesses, what activities were undertaken to bring about this involvement?
- What were the main components of the program when it was first established? How was it determined to include some components and not others?
- Has the program been modified over time? What changes have been made in the program? What led to these changes? Have the changes improved the effectiveness of the program? In what ways?
- What were the original sources of program funding? Has program funding changed over time? In what ways? Have funding changes influenced the scope, structure and content of the program? In what ways?

PROGRAM OBJECTIVES

- What are the primary goals of the program?
- What are the short-term goals that are designed to achieve longer-term program goals?
- Do the goals of the program differ from student to student?
- How are specific objectives established for individual students?
- Does the program have any objectives that are specifically aimed at female students who are "at-risk" or who have dropped out?

STUDENT SELECTION

- How are students identified for participation in the program?
- Are students recruited for the program? If, so, what procedures are used for recruitment? What area does the recruitment encompass?
- What is the target group for recruitment?
- What eligibility criteria are used to screen prospective students for the program?
- Does the program rely solely on: previous school experience, including attendance, credits accumulated, grades; test scores; teacher or counselor recommendations; some combination of the above in selecting students?
- How are these factors weighted in determining student selection?
- What is the relative status of the student? Does the program accept the most "at-risk" students or students who rank higher on measures of need, ability, achievement?
- Does the program attempt to maintain a balance between males and females? Are there special recruitment or selection procedures for female students?
- How well do student selection precedures work? Would you change the procedures in any way to make them work better?

MATCHING STUDENTS WITH PROGRAMS

- Do all participants in the program receive the same set of program services?
- What diagnostic procedures are used to determine the mix of program services for individual students?
- How are students' academic needs diagnosed? Does diagnosis involve the use of standardized tests; (If so, which ones are used and how are they used?); teacher recommendations; some combination of the above?
- How are the results of the diagnosis used to structure a learning program for the student?
- Who participates in the development of the student's learning program: student and teacher; counselor, parent(s), other?
- What procedures are used to: develop the student's learning program; determine the learning objectives; determine curriculum and materials; establish the student's schedule?
- How are the results of the diagnosis used to determine the support services that are required?
- What procedures are used to determine and develop the non-academic component of the program, specifically, the guidance and counseling component and the vocational component?
- Who participates in the development of these elements of the program?
- How are the academic and non-academic components of the program integrated? Who has responsibility for this integration?

PROGRAM SERVICES

Academic Component of Program

Setting

- Is academic coursework taught in a regular classroom setting or in an alternative setting?
- If the latter, does this involve: alternative classes in a regular school; school-within-a-school; alternative school; other?
- What is the rationale for the alternative setting?
- What are the assets and liabilities of the alternative setting? Does the alternative setting produce a better learning environment for the student or does it result in isolation of students from the mainstream or stigmatization of the student? (Probe)

Organization/Staffing

- How many students receive services in the program?
- What is the size of academic classes in the program?
- Do students follow a block program or do they go to courses based on an individualized schedule?
- What is the rationale for the block or individualized schedule?
- Does the scheduling of academic classes work as anticipated? What are the strengths and weaknesses of this type of scheduling?
- What is the pupil/teacher ratio in the program?
- What type of staff provide academic coursework to students in the program: regular teachers; other professional staff; volunteers, tutors, or aides; some combination of the above; other?
- Does the staff receive any specialized training to teach students in the program?
- Does the staff have any responsibilities beyond their regular teaching duties?
- Are staff selected for the program based on their attitudes or characteristics?
- Do staff receive any special compensation (monetary or reduced responsibilities in other areas) for work in the program?

Curriculum and Materials

- Does the program follow the regular school curriculum or does it provide a special curriculum?
- What does completion of the curriculum produce: a regular diploma; an alternative certificate such as a GED; other?
- What are the special features of the curriculum: individualized learning; mastery learning; learning contracts; integrated academic and vocational curriculum; other?
- How are the special features of the curriculum put into operation in the program?
- Does the curriculum use special materials? If so, what materials? Why were these selected? Were other materials considered and rejected? Why?
- Do the special curriculum materials appear to be more effective with at-risk students than other materials? What evidence do you have of their effectiveness?

Instructional Techniques

- Does the program employ any special instructional techniques: computer assisted instruction; learning contracts; peer tutoring; thinking skills; repetition; small steps; integration; study skills; classroom management techniques; ability grouping; other?
- What was the basis for using this approach?
- Were any other approaches considered (or tried) and rejected? Why?
- Are different techniques or combinations of techniques used with different students? If so, how are students matched to approaches?

Special Activities or Features

- Does the program feature other instructional components: field trips; extracurricular activities; other?
- Why were these components included in the program? How do they fit with the regular instructional program?
- How often do these special activities occur?
- Who conducts or supervises these special activities?
- How is funding provided: as part of the regular program budget; fees; some combination of the above; other?
- Are special features integral to the program or supplemental to core activities?

Affective/Behavioral Component of Program

Objectives

- What are the affective/behavioral goals of the program: improved self-image or self-esteem; improved interactions with peers or school staff; other?
- How are behavioral objectives established for individual students: tests; interviews; other?
- What process is used to establish behavioral goals? Who participates in the process?

Services

- What types of services are provided to achieve these behavioral objectives: individual or group counseling; mentors, buddies, teachers, special resource personnel; other?
- Who are the providers of these services: school personnel; social agency personnel; health department staff; other?
- What is the background or training of staff?
- What is the setting for services: the school; other? If other than the school, what is the rationale for the alternative site?
- What is the frequency and duration of services, e.g, guidance counseling sessions once a week, monthly meetings with a mentor or buddy?
- What is the intensity of these services: counselor/student ratios of 20:1; group counseling with five students; individual sessions twice a week for one hour; other?
- Do students receive similar or different mixes of services? If the latter, how is the specific service mix determined for individual students?
- Do program staff use special methods, techniques, materials or activities to promote behavioral objectives?
- Do program staff serve as brokers with other agencies to provide services to students, e.g., career counselors, job training agencies, health departments?
- How were these arrangements or linkages with other providers established? How do the linkages operate in practice?
- How are services from multiple agencies coordinated? Who has responsibility for this coordination?
- How do counselors/other professional staff assess and monitor students' progress? How do they determine when students no longer require services or require fewer or less intense services?

Attendance Component of Program

- Does the program use special techniques or activities to promote better student attendance? If so, describe activities.

- Does the program organize special parent conferences? How often? For what purposes? What is the rate of parental participation?

Vocational/Career Component of Program

- What are the objectives of the career preparation component of the program: awareness of career opportunities; work attitudes and skills; specific job skills; other? Describe.

- How are vocational objectives established for individual students: tests; skills aptitudes; interviews; recommendations; combinations of measures; others?

- Are students matched with specific vocational program services or do all students receive the same program? How is the specific service mix established for individual students?

- Who are the providers of the services: school personnel such as vocational education teachers; career counseling agencies; job training agencies; other?

- What is the background and training of staff?

- What is the frequency and duration of services?

- What is the intensity of services?

- Do program staff use special methods, techniques, materials or activities to achieve vocational/career objectives?

- Where agencies outside the school provide services, how were these arrangements or linkages with other providers established? How do the linkages operate in practice?

- How are services from multiple agencies coordinated? Who has responsibility for this coordination?

- Does the program use job guarantees or other incentives to attract or retain students in the program?

- What types of jobs are guaranteed?

- What standards must students meet to be guaranteed employment?

- What are the linkages between the program and the business community?

- What are the strengths and weaknesses of the school-business linkage?

OTHER PROGRAM COMPONENTS

Parental Involvement

- What activities does the program carry out to generate greater parental involvement in the child's schooling?
- Who is involved the activities?
- What is the frequency of activities?
- How are parents used to shape the child's program, to monitor the child's progress, and to provide feedback to staff about how the program is working?
- Does parental involvement appear to be related to program effectiveness? In what ways? What is the evidence of this linkage?

Community Involvement

- What activities are carried out to stimulate greater community involvement in and support of the program?
- What distinguishes these activities from the school or district's normal public relations activities?
- Who is involved in these activities?
- What is the frequency of these activities?
- What is the duration and intensity of these activities?
- Has community involvement in the program been sustained over time? If so, what techniques have been used to sustain this involvement?
- Does community involvement appear to be related to program effectiveness? In what ways? What is the evidence of this linkage?

School-Business Collaboration

- What activities were undertaken to develop and maintain the school-business collaboration?
- Who had responsibility for establishing and who has responsibility for maintaining the collaboration?
- How were the roles and responsibilities of the collaborative members established?
- What are the current roles and responsibilities of the collaborative members?

- What activities are currently carried out to maintain the school-business collaboration? What is the frequency and intensity of these activities?

- What types of problems have emerged in maintaining the school-business collaborative? What measures have been undertaken to address these problems? How successful have these measures been?

- Does business involvement with the program appear to be related to program effectiveness? In what ways? What is the evidence of this linkage?

- If you were to recommend a method for establishing a school-business collaboration in other school districts based on your experience, what recommendations would you make?

- What role does business play in funding the program? What form does this financial support take?

OTHER PROGRAM COMPONENTS

- What are other unique features of the program?
- What activities are conducted in this area? How are these carried out?
- Who is responsible for this component of the program?
- What is the frequency and intensity of these activities?
- What are the strengths and weakness of this component of the program? How would you modify this program component to improve the program's effectiveness?
- Does this feature of the program appear to be related to program effectiveness? What is the evidence of this linkage?

PROGRAM EFFECTS

We would like to determine whether it would be possible to conduct a more rigorous evaluation of program effects than the program currently prepares. These questions are designed to determine whether this is feasible.

- Does the program maintain records on: student background characteristics; test scores, grades and attendance rates prior to program participation; student attendance during the program; courses completed; credits accumulated; test scores; grade point averages; graduation rates; and education and employment following participation in the program? In what form?

- Would it be possible to assemble and analyze these data more extensively than in existing evaluation reports? What would be required to do so?

- Would it be possible to assemble and analyze these data for a similar group of students in the school/district who did not/do not participate in the program? What would be required to do so?

- What procedures would be required to collect and analyze these data?

APPENDIX B

STAFF PROTOCOL: KEY PROGRAM ELEMENTS

KEY PROGRAM ELEMENTS

Several elements of dropout prevention programs have been identified in the literature as key to program success. I will read you a list of these elements to you. Please indicate whether this element is applicable to your program. If it is, please indicate how important this element is to the effectiveness of the program. Please rank order these on a scale of 1 to 5, with 1 as not very important and 5 as very important (or critical) to program success.

Organization

Small program size _____

Program autonomy _____

Low-pupil teacher ratios _____

Alternative program setting _____

Block programming _____

Principal leadership _____

Program Philosophy or Goals

Well defined mission _____

Cooperative approach to instruction _____

Emphasis on real-life problem solving _____

Survival skills training _____

Develop study skills _____

Other _____

Staff and Staff/Student Relationships

Teacher responsibility for student success _____

High teacher expectations of students _____

Clear communication of goals, expectations and responsibilities to students _____

Diversified roles for teachers _____

Staff development/teacher training _____

Special compensation for teachers _____

Individualized attention _____

Other _____

Academic Component of Program

Diagnosis of students' academic needs _____

Individualized learning program _____

Matching student learning styles with methods of instruction _____

Scheduling of academic component _____

Setting of instruction _____

Focus on basic skills _____

Modified academic curriculum _____

Structured learning experiences _____

Contract learning _____

Competency-based curriculum _____

Tutoring _____

Special activities such as field trips _____

Interactive approach to teaching _____

Instructional techniques (ability grouping, thinking skills, repetition, study skills, ability grouping _____

Classroom management techniques _____

Attendance Component

Incentives _____

Improved recordkeeping _____

Parent involvement in attendance monitoring _____

School organization and climate _____

Discipline _____

Other _____

Other _____

Vocational and Career Component of Program

Work study _____

Career awareness courses _____

Vocational training _____

Internships _____

Integration of academic and vocational coursework _____

Guaranteed employment _____

Involvement of the business community _____

Other _____

Other _____

Guidance and Counseling Services

Peer counseling _____

Role modeling _____

Special praise for good work _____

Group counseling _____

Individual counseling _____

Mentors, buddies _____

Courses in life skills _____

One-to-one relationships with teachers _____

Parental Participation in the Program _____

Community Involvement in the Program _____

School-Business Collaboration _____

Other _____

Other _____

APPENDIX C

STAFF PROTOCOL: PROGRAM OPERATIONS

[redacted]

PROGRAM OPERATIONS

Different components of the program may be operating more or less successfully. These questions are designed to elicit opinions about how well the program is operating, where the program's strengths and deficiencies are. Respondents will be asked to rate the program's success in each of these areas on a scale of 1 to 5, with 1 indicating that there are problems in this area of the program and 5 indicating that the program is working very well in this area. After respondents have addressed all of the questions, we will go back and probe for more information. Where respondents answered 1 or 2 to a question, we will ask what the problem areas are and how they are being addressed. Where they answered 4 or 5, we will ask what they are doing to bring about success.

Attracting and retaining teachers and program staff _____

Providing staff training and development _____

Developing teacher commitment to program goals _____

Developing appropriate teacher interactions with students _____

Diagnosing students' needs _____

Determining the instructional, counseling and vocational components of students' programs _____

Matching curriculum and services to student needs _____

Providing the appropriate setting for student instruction _____

Organizing and scheduling program services _____

Coordinating services for students with non-school agencies _____

Providing adequate or appropriate counseling for students _____

Obtaining internships or job placements for students _____

Obtaining and maintaining parental involvement in their child's educational program _____

Obtaining the support of the business community _____

Ensuring that the business community carries out its responsibilities and commitments to the program _____

Obtaining and maintaining the support of the local community for the program _____

[redacted]

Maintaining student interest in staying in school _____

Achieving students' academic goals _____

Improving student attendance _____

Meeting the job skills objectives of the program _____

Meeting the behavioral objectives of the program _____

Preventing students from dropping out of school _____

Placing students in gainful employment _____